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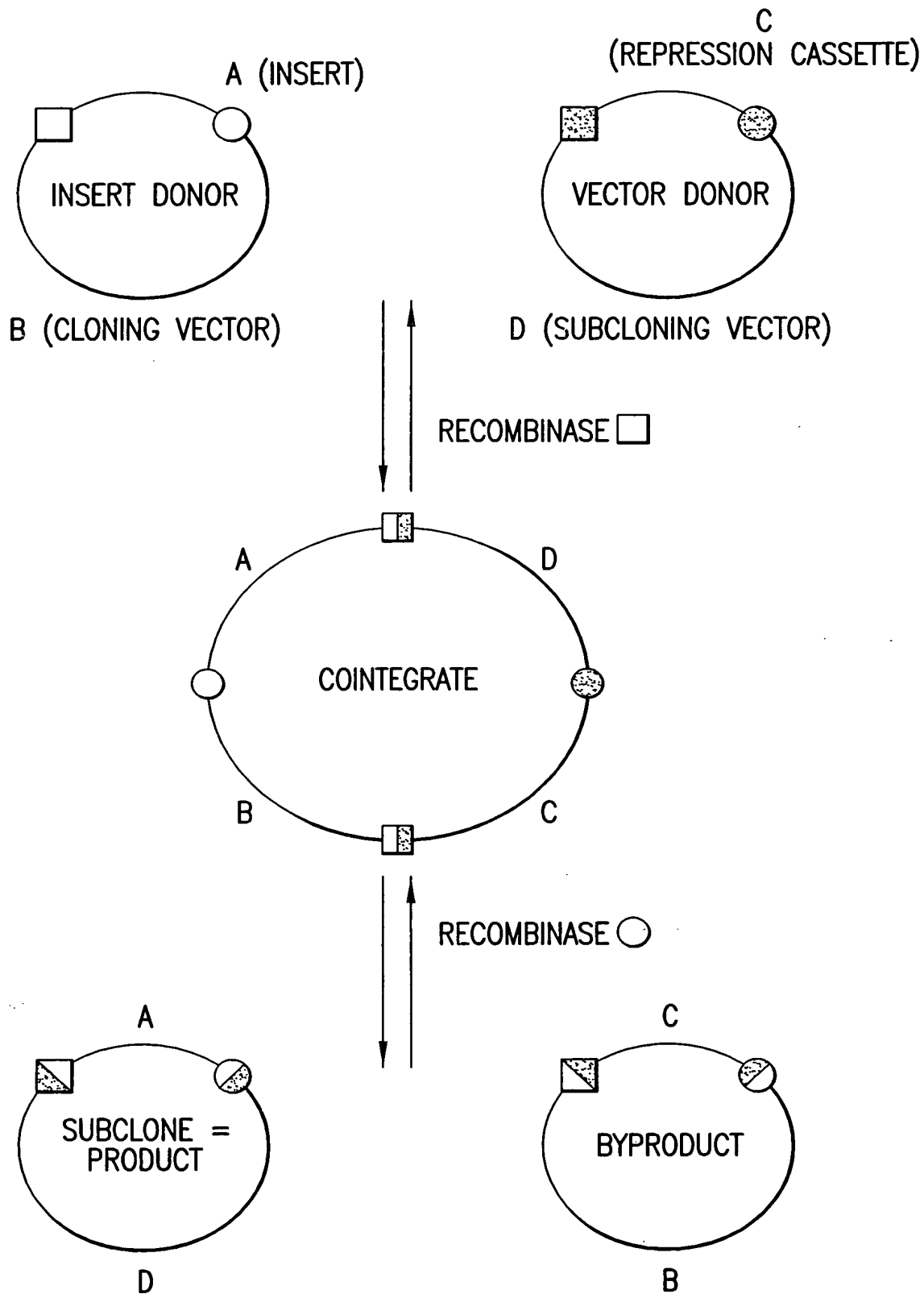


FIG. 1

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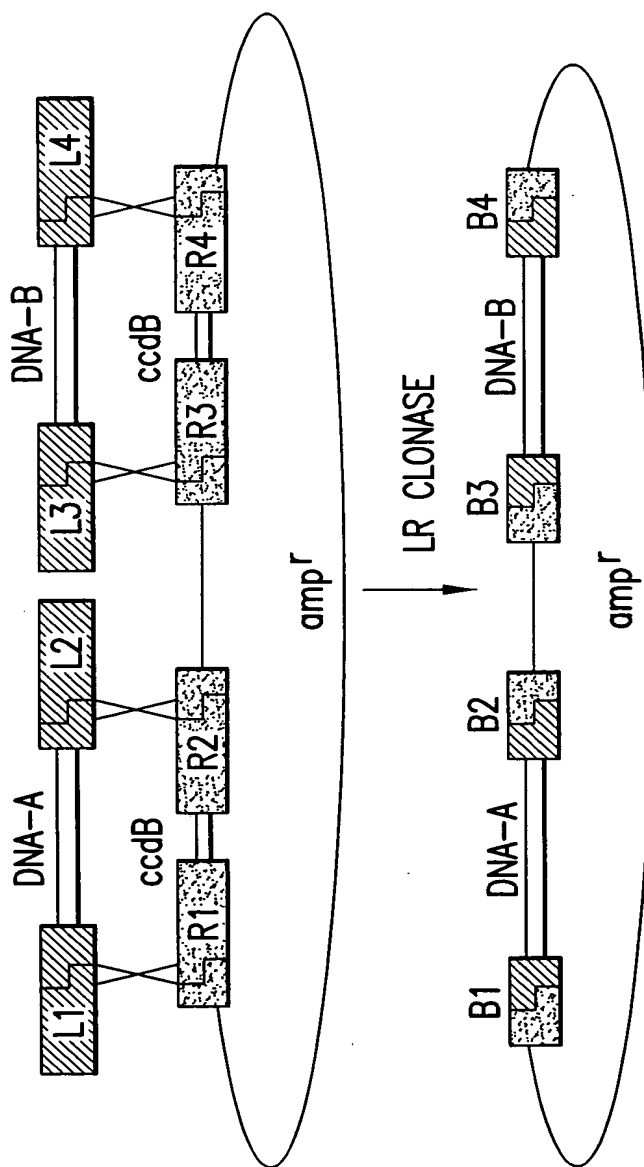


FIG.2

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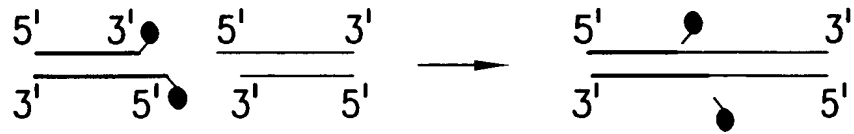


FIG. 3A

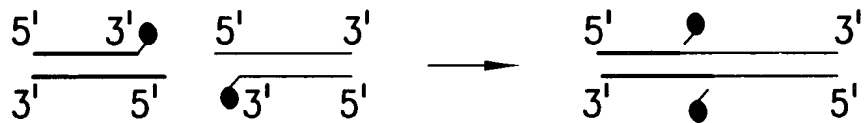


FIG. 3B



FIG. 3C

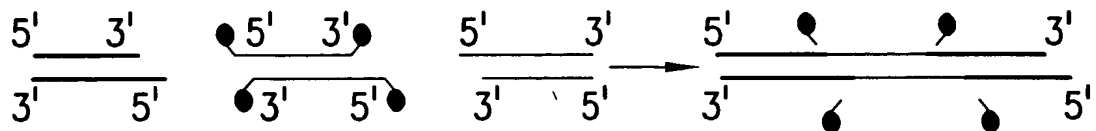


FIG. 3D

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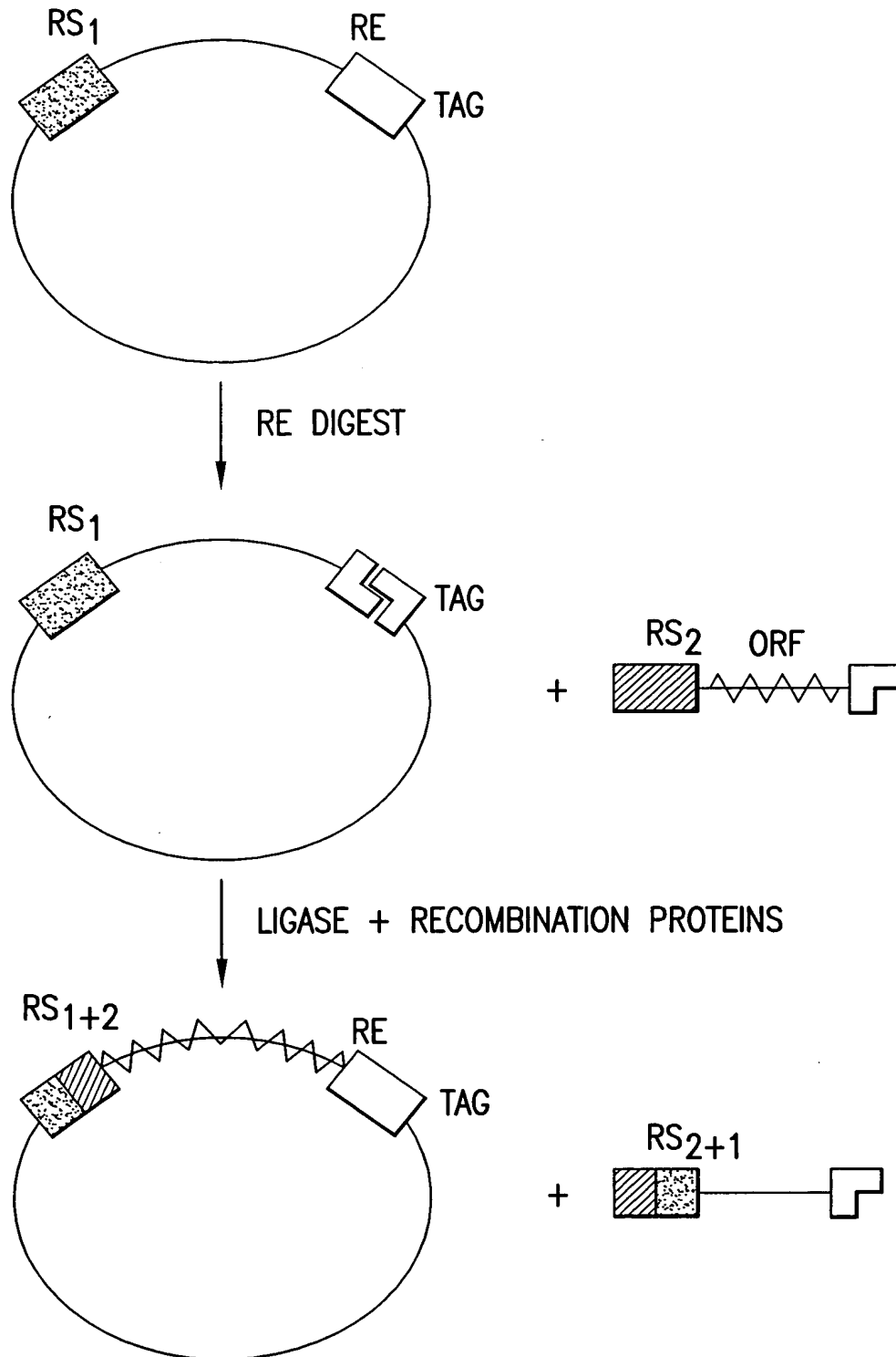


FIG.4

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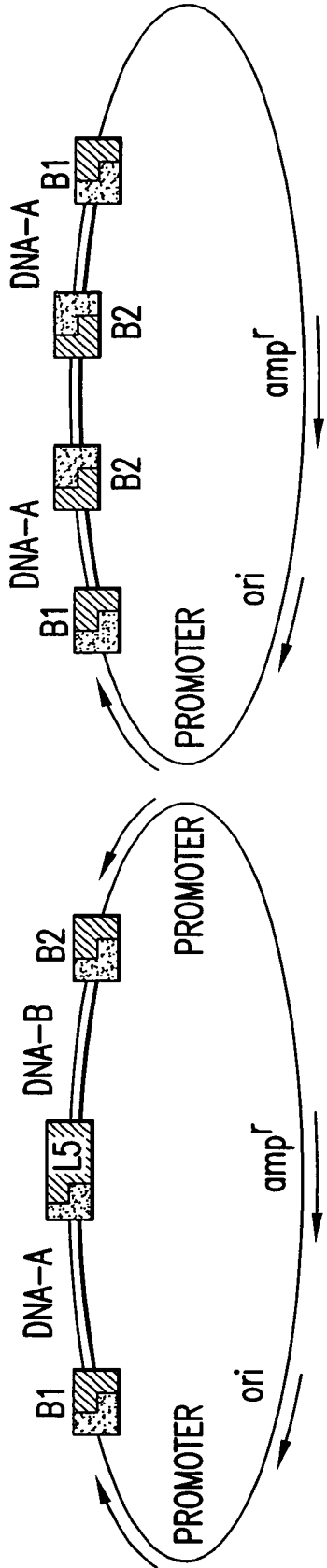


FIG. 5A

FIG. 5D

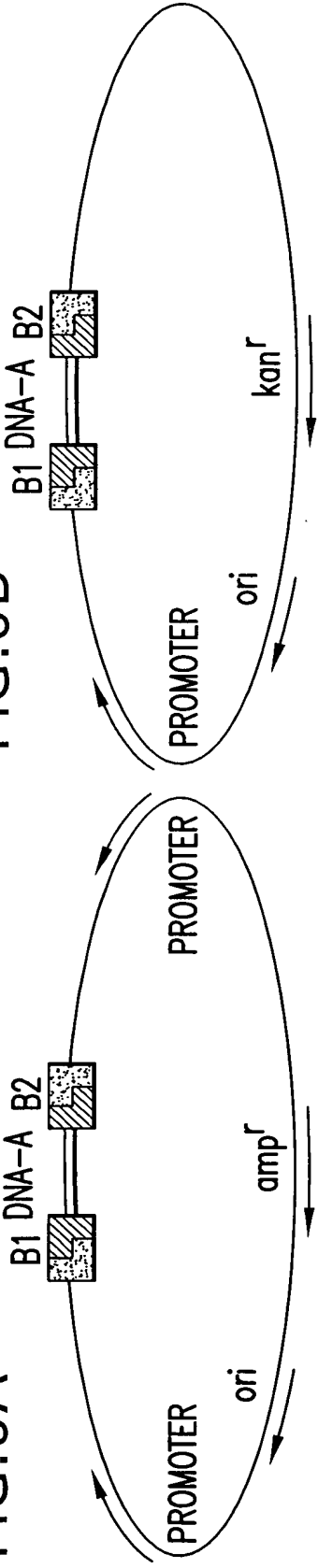


FIG. 5B

FIG. 5E

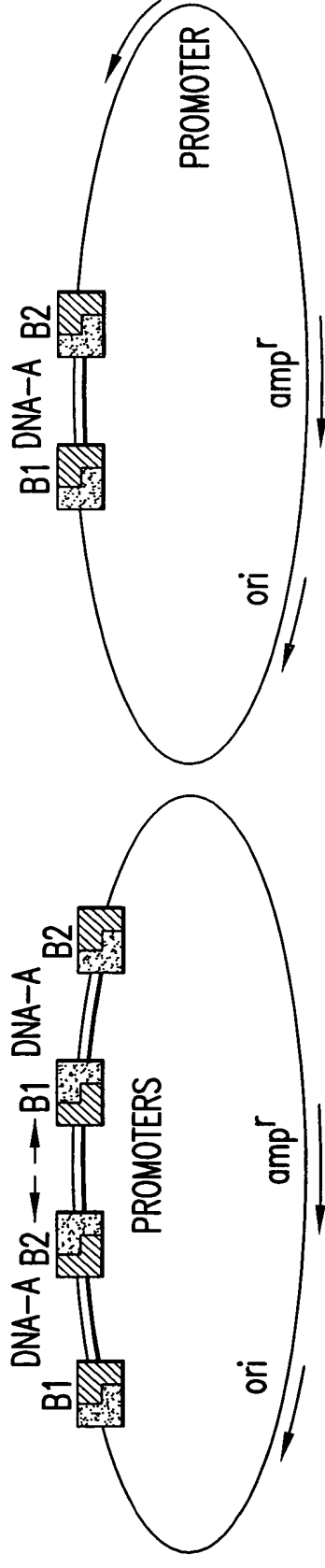


FIG. 5C

FIG. 5F

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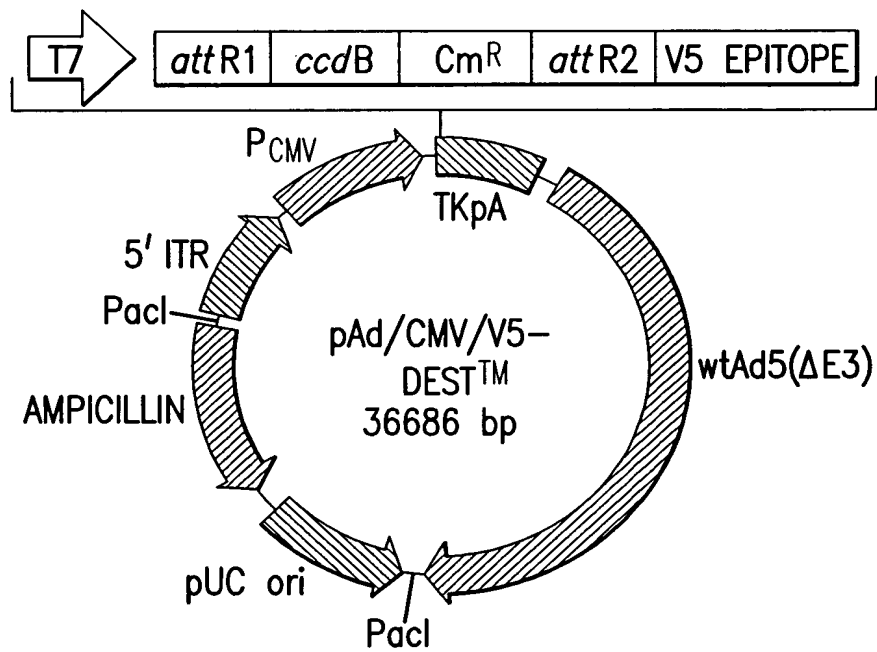


FIG.6

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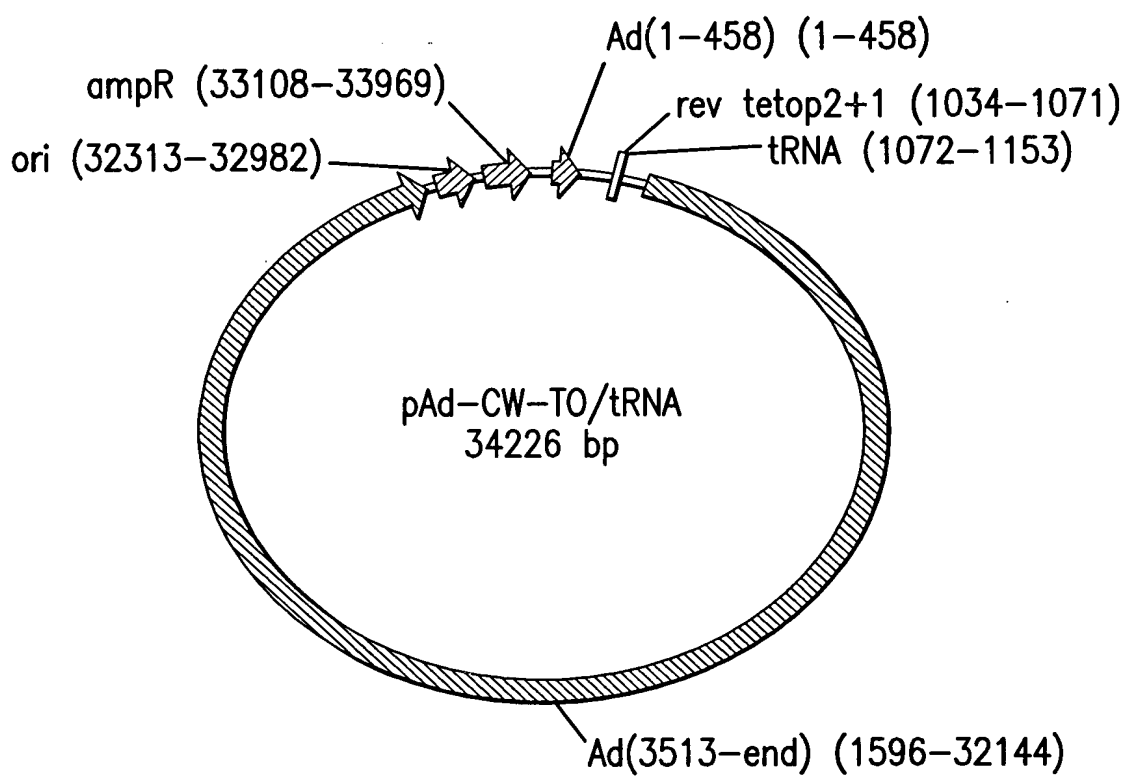


FIG.7

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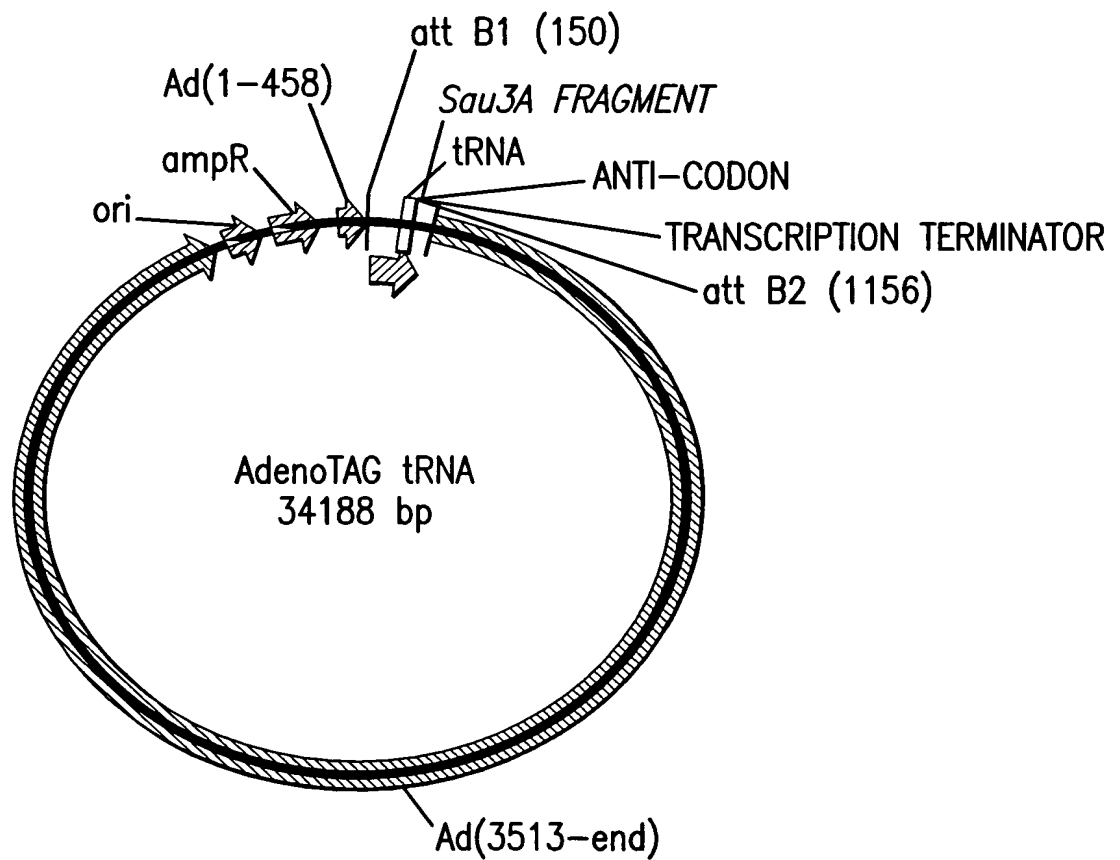


FIG.8



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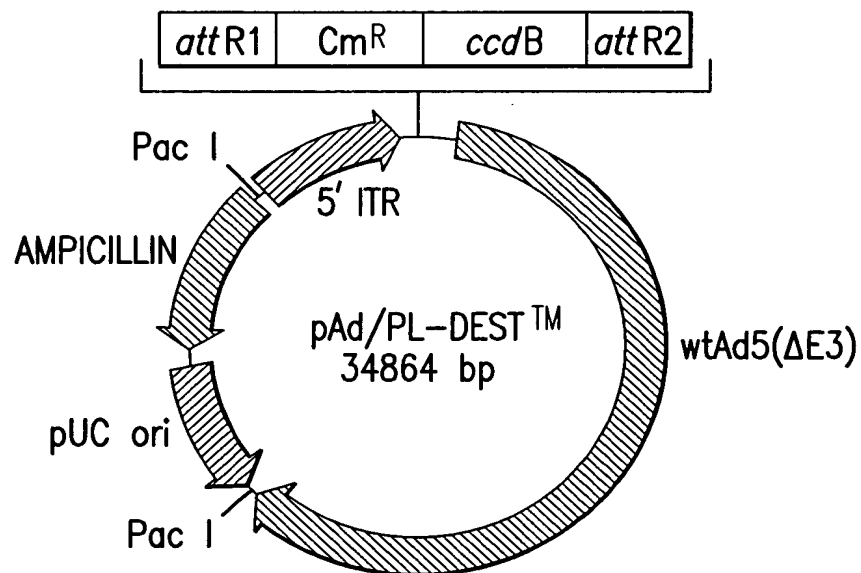


FIG.9

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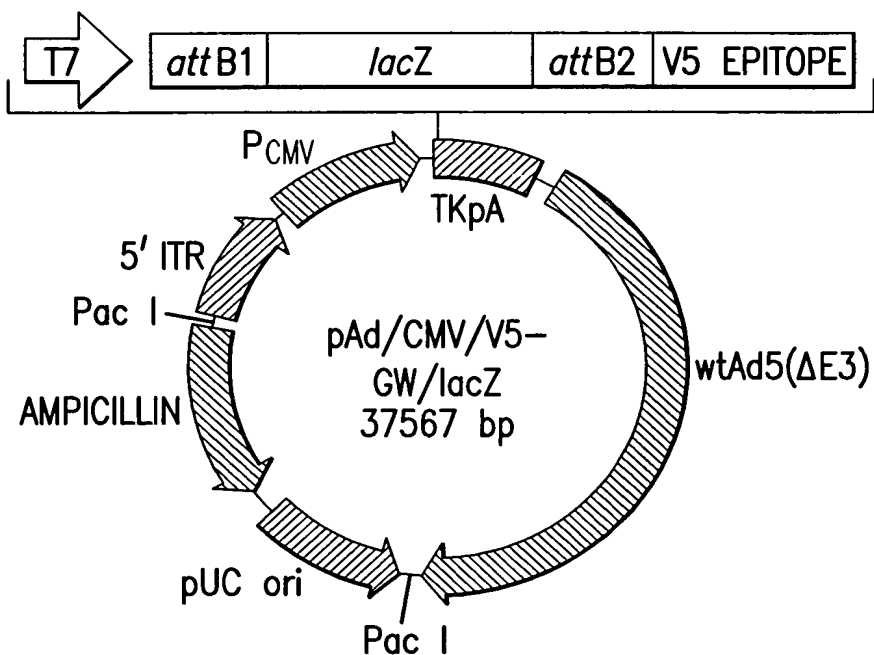


FIG.10

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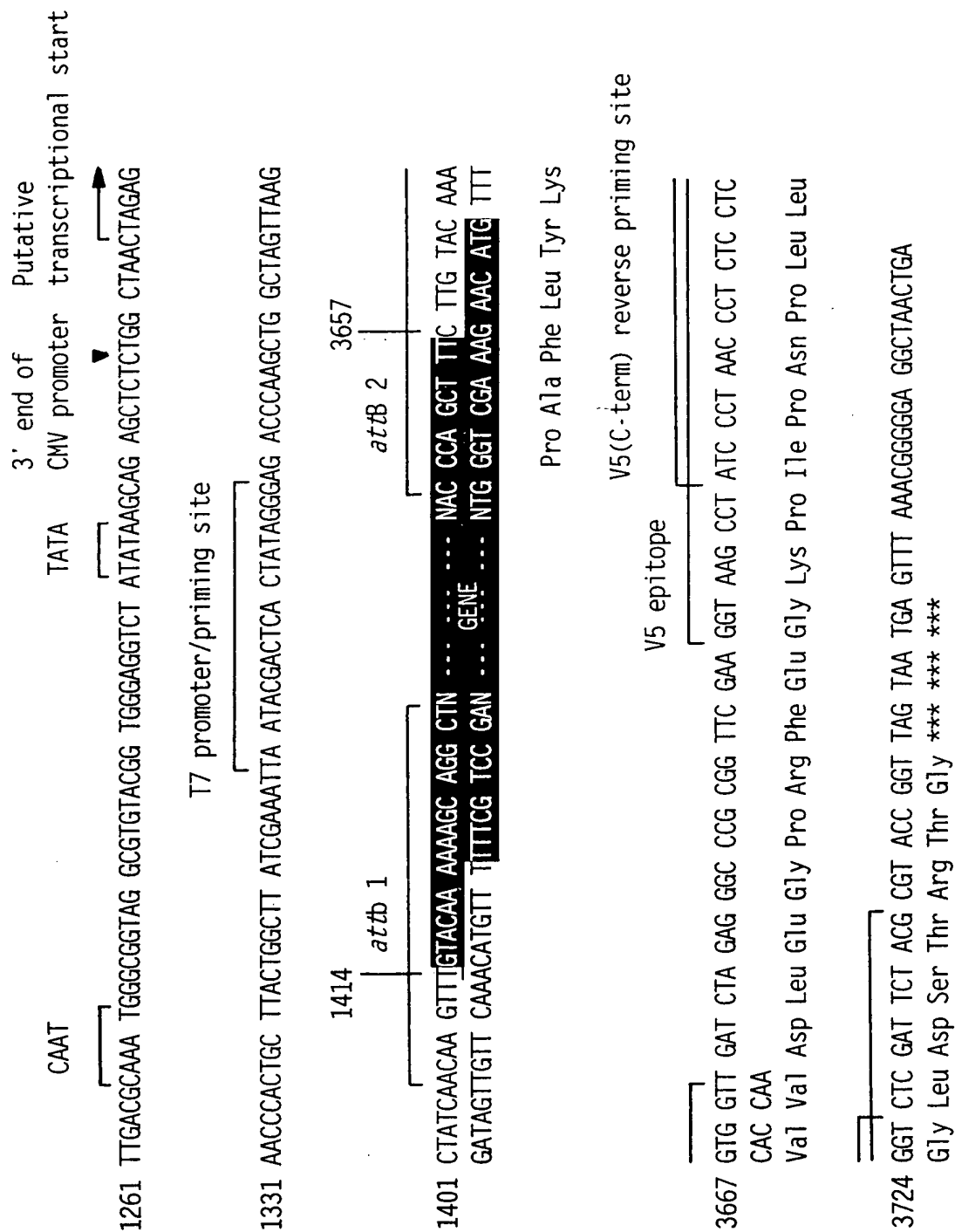


FIG.11

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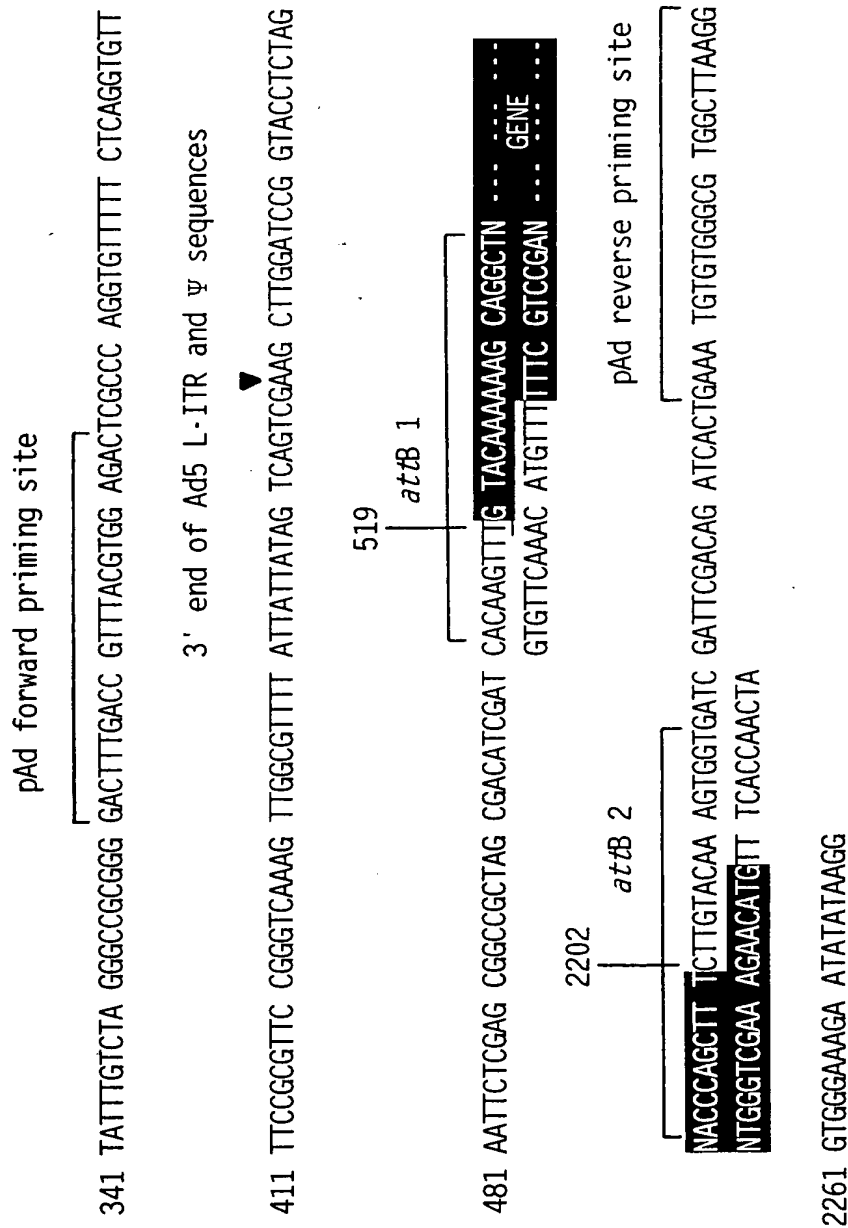


FIG.12

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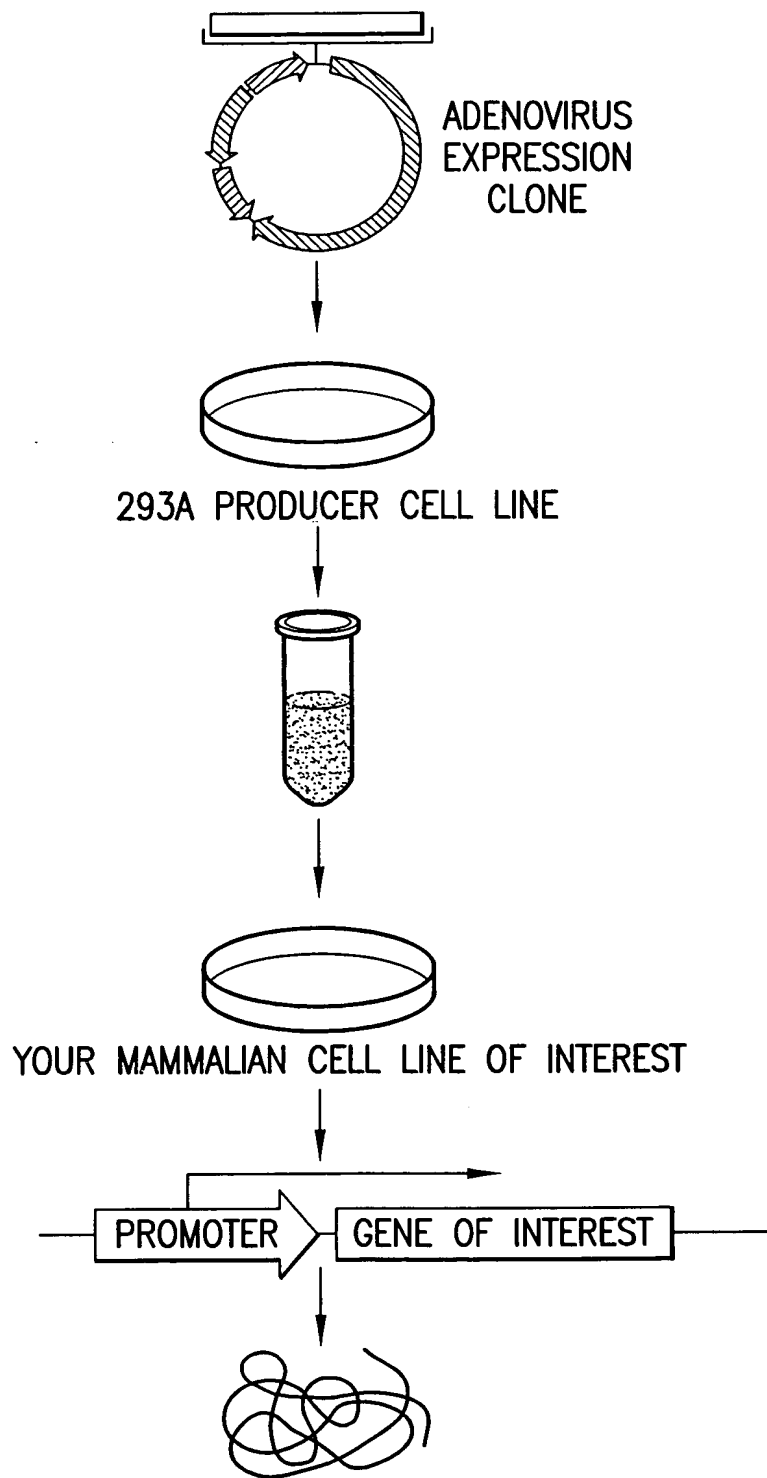


FIG.13

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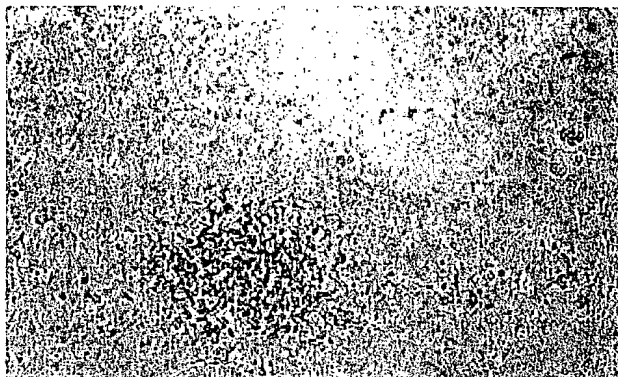


FIG.14A

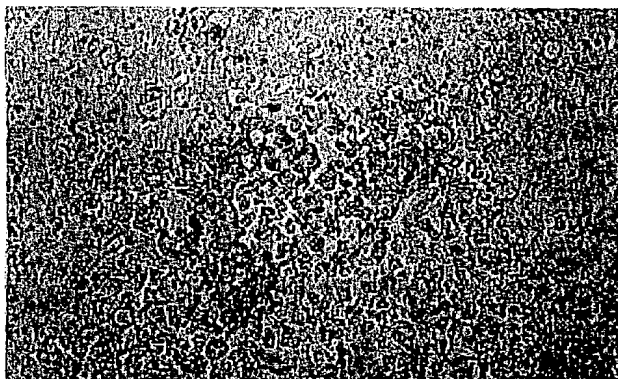


FIG.14B

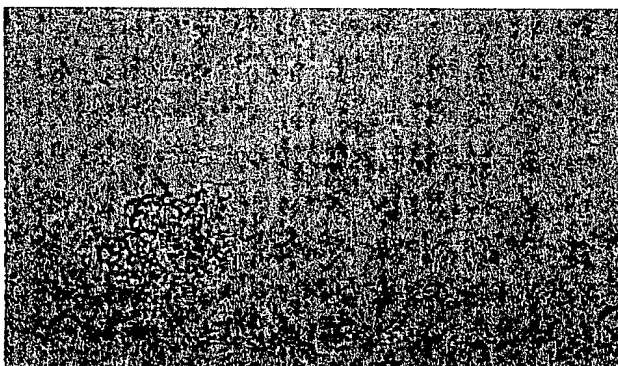


FIG.14C

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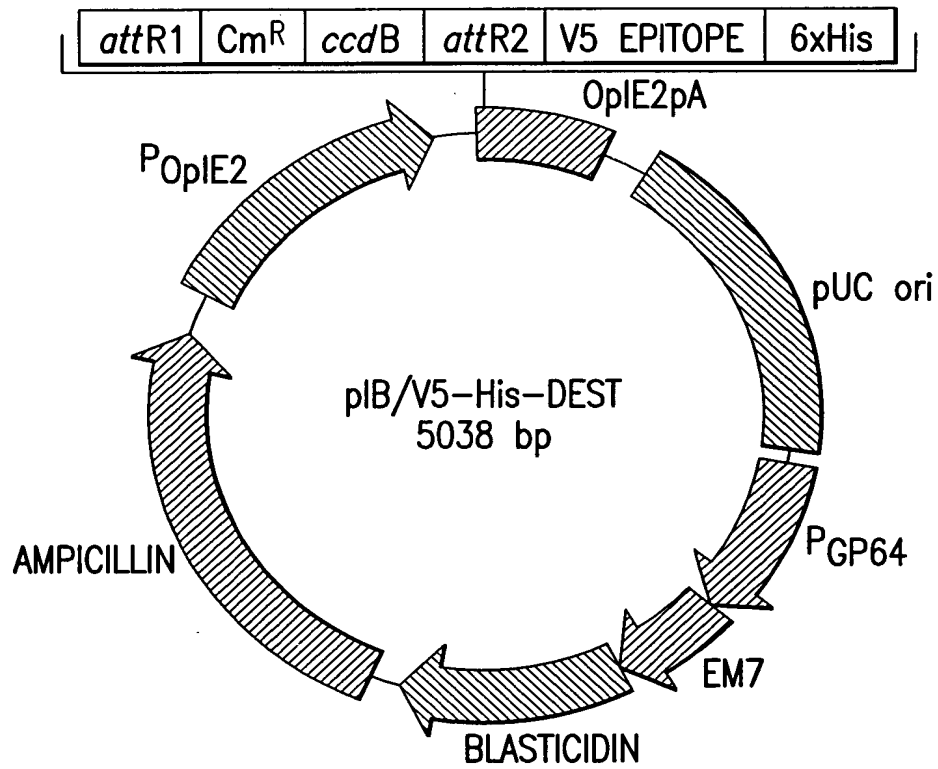


FIG. 15

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1 GGATCATGAT GATAACAAT GTATGGTGCT AATGTTGCTT CAACAACAAT TCTGTTGAAC

61 TGTGTTTTCA TGTTGCCAA CAAGCACCTT TATACTCGGT GGCCTCCCCA CCACCAACTT

121 TTTTGCACTG CAAAAAACA CGCTTTTGCA CGGGGGCCCA TACATAGTAC AAACCTCTACG

181 TTTCTAGAC TATTTTACAT AAATAGTCTA CACGTTGTGA TAGCTCCAA ATACACTACC

241 ACACATTGAA CCTTTTGGCA GTGCAAAAAA GTACGTGTGCG GCAGTCACGT AGGCCGGCCT

301 TATCGGGTGG CGTCCTGTCA CGTACGAATC ACATTATCGG ACCGGACGAG TGTGTCTTA

361 TCGTGACAGG ACGCCAGCTT CCTGTGTTGC TAACCGCAGC CGGACGCAAC TCCTTATCGG

421 AACAGGACGC GCCTCCATAT CAGCCGCGCG TTATCTCATG CGCGTGACCG GACACGAGGC

481 GCCCGTCCCG CTTATCGGC CTATAAATAC AGCCCGCAAC GATCTGGTAA ACACAGTTGA

541 ACAGCATCTG TTCGAATTTA

TATA

Start of Transcription

FIG.16



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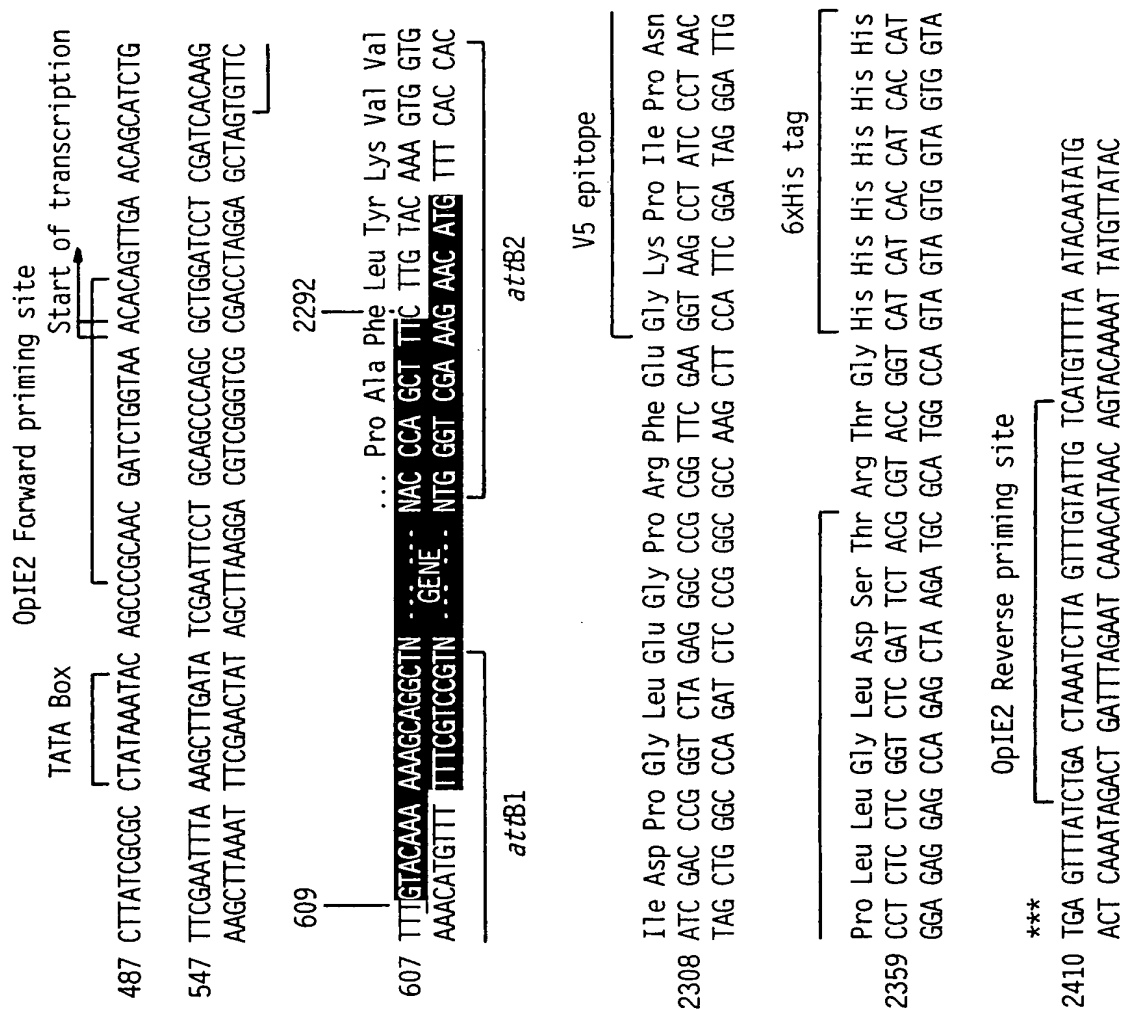


FIG.17

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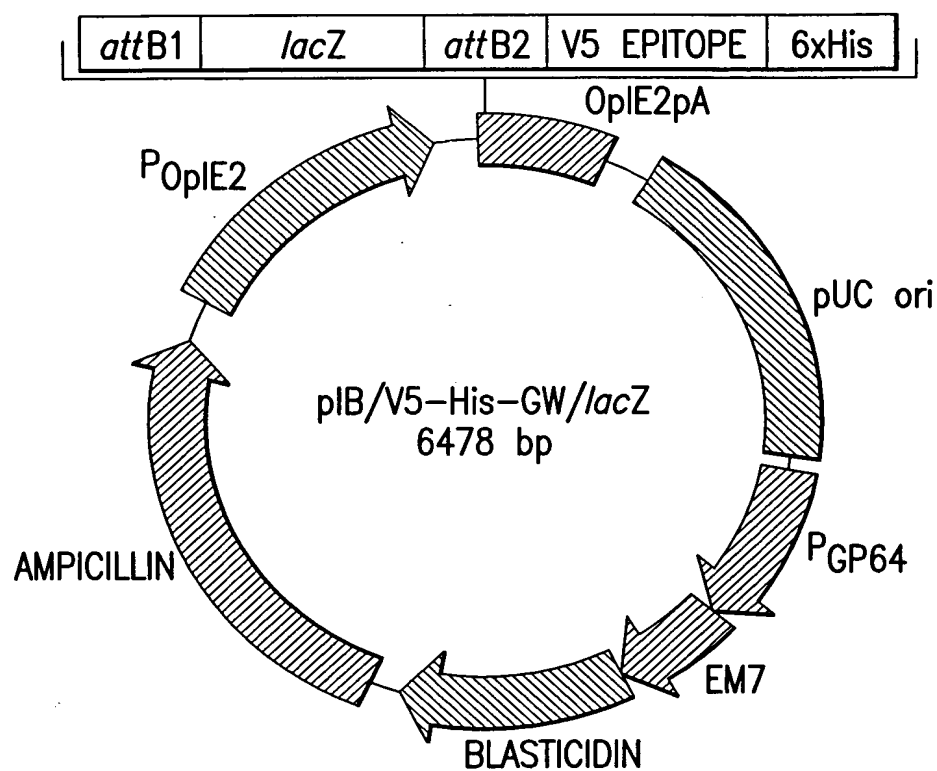


FIG.18

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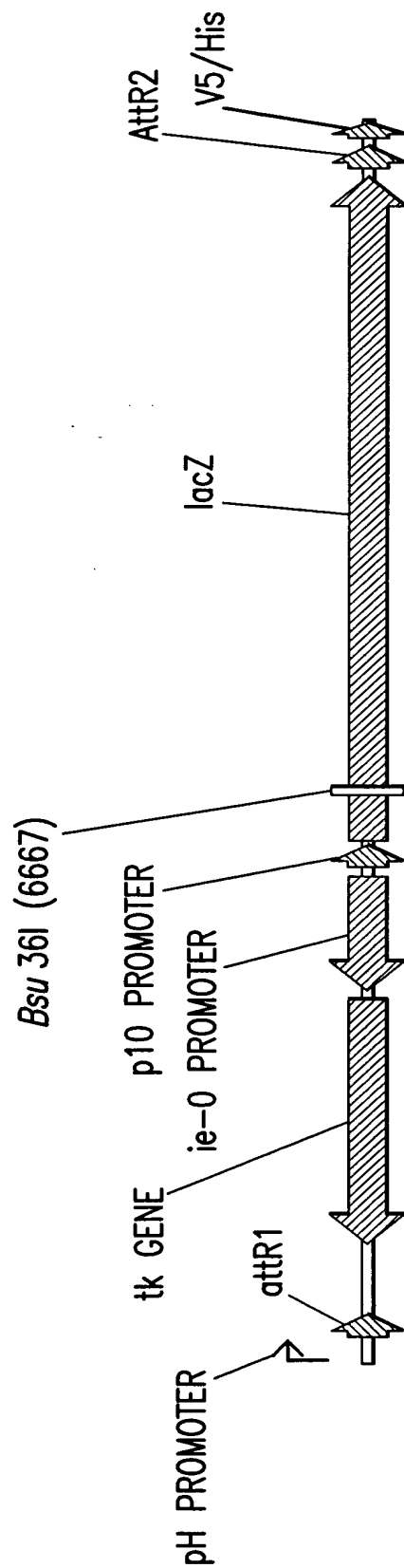


FIG. 19A

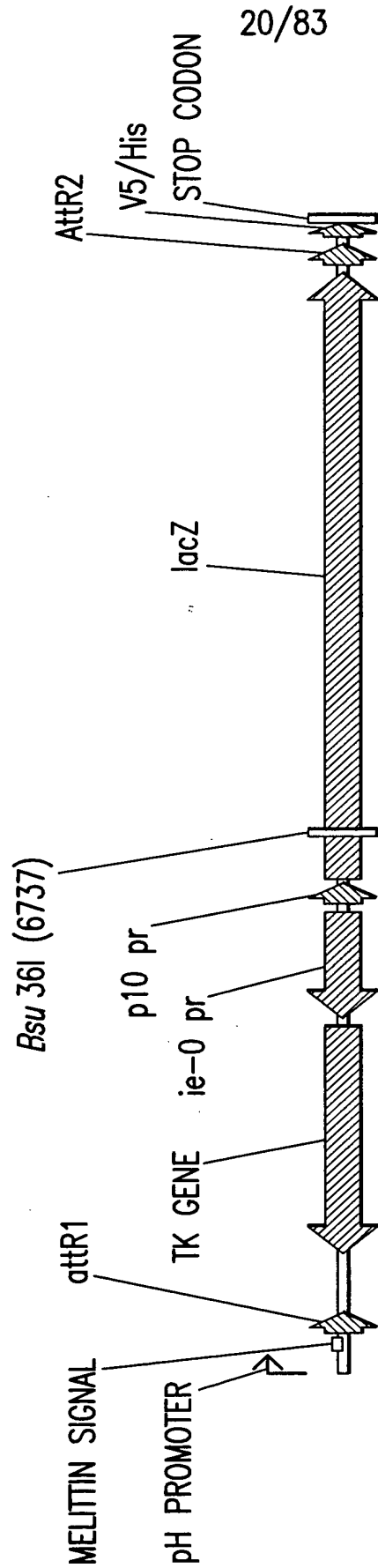


FIG. 19B

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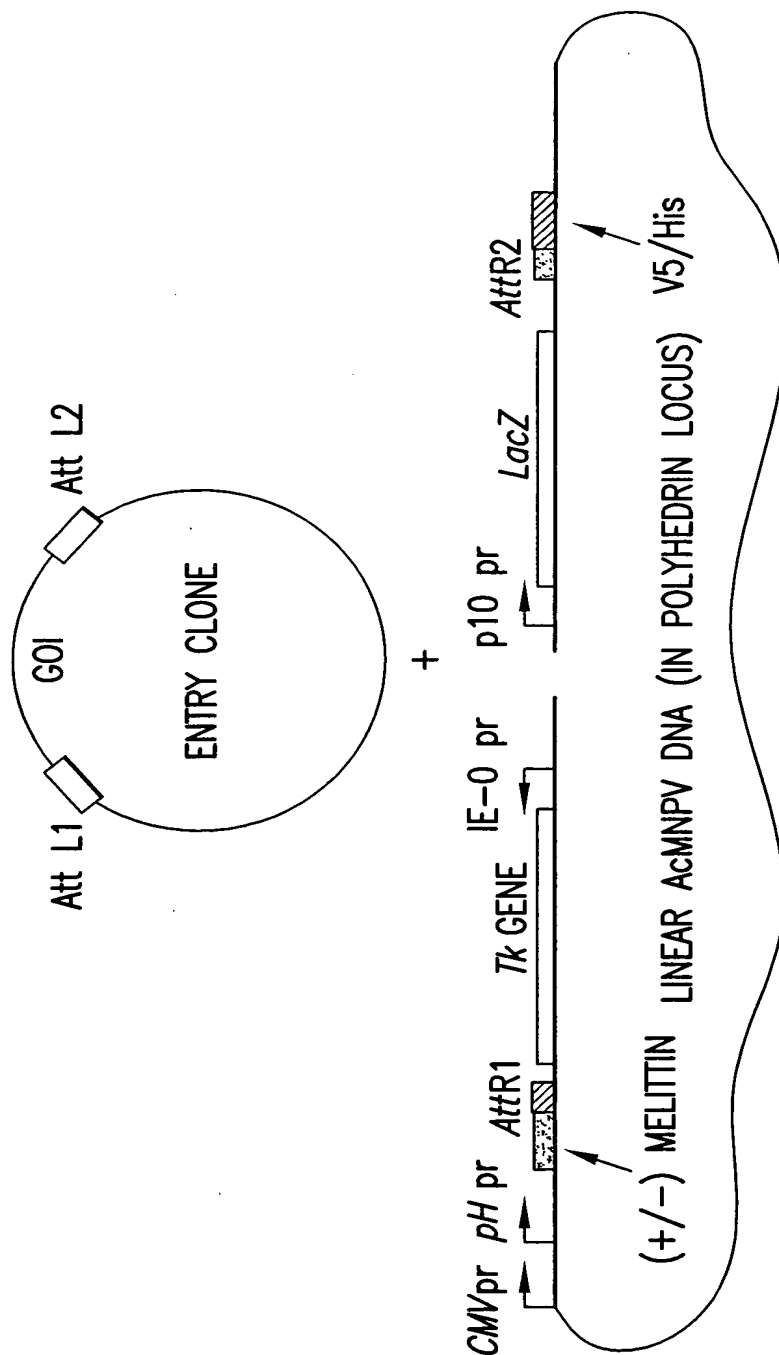


FIG.20

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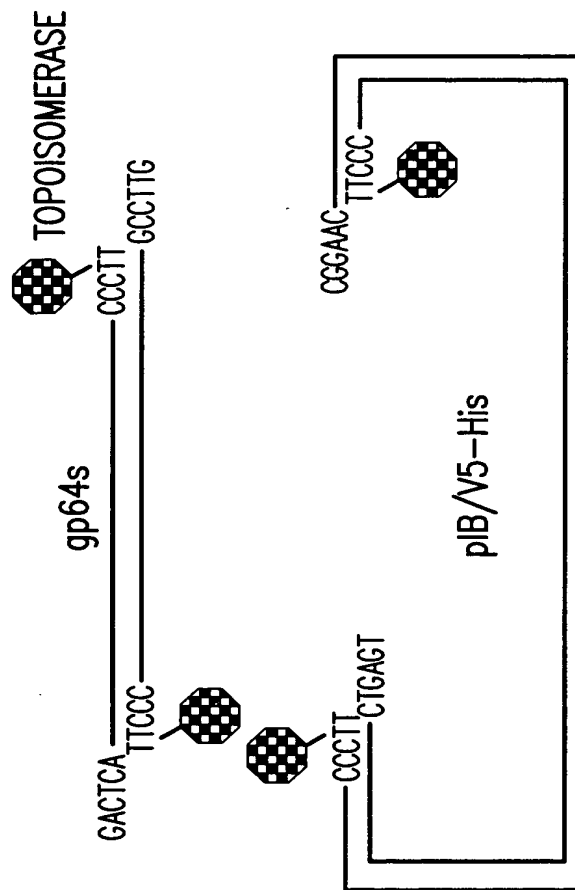


FIG. 21

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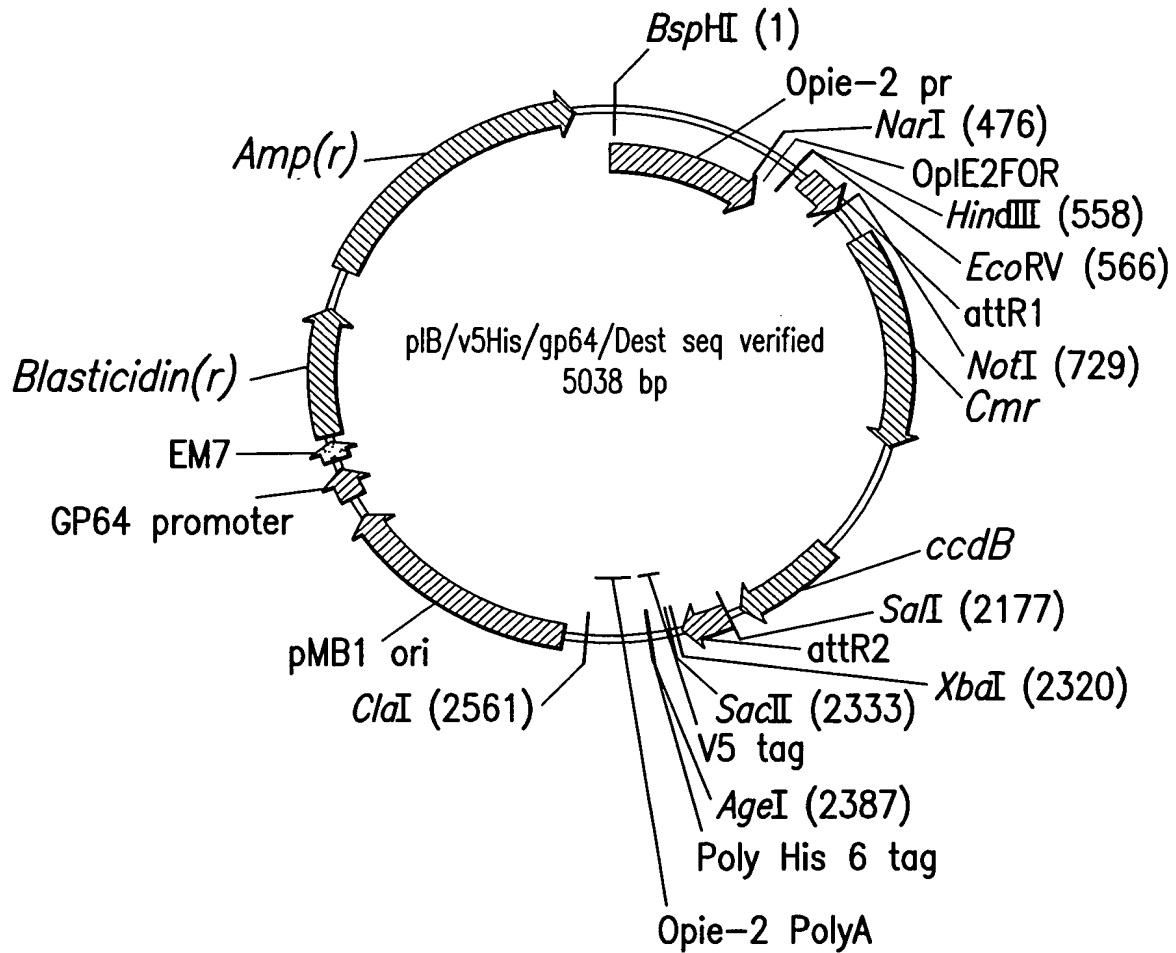
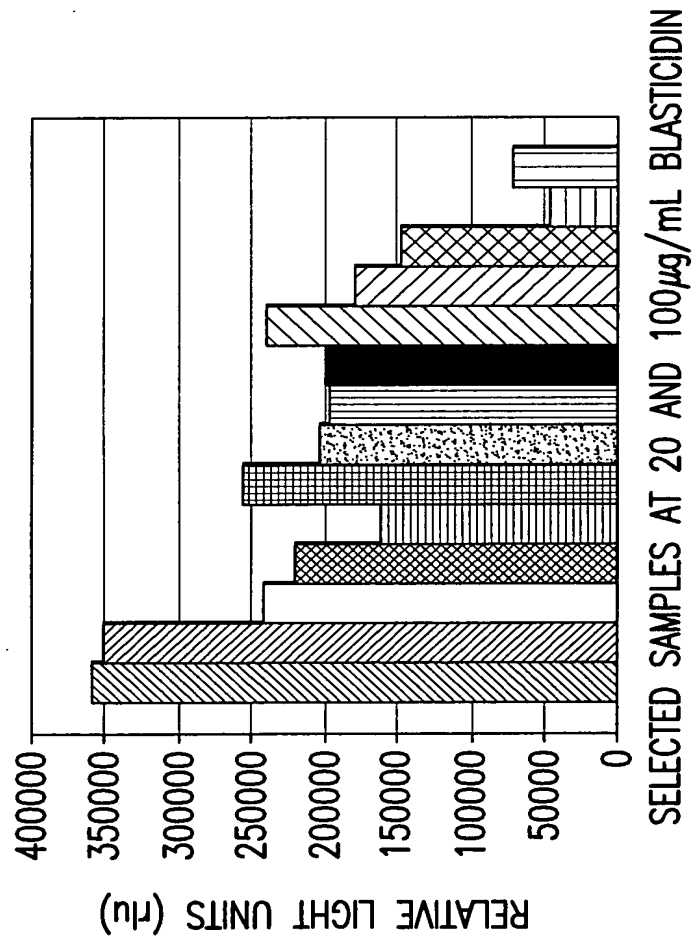


FIG.22

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TROPIX ASSAY OF Sf21 CELLS TRANSFECTED WITH ALTERNATE  
 SELECTION PROMOTERS AFTER 1 WEEK OF SELECTION



- GP64-SHORT#1, 20µg/mL BLAST
- GP64-SHORT#1, 100µg/mL BLAST
- GP64-SHORT#2, 20µg/mL BLAST
- GP64-SHORT#2, 100µg/mL BLAST
- PE38-LONG#1, 20µg/mL BLAST
- PE38-LONG#1, 100µg/mL BLAST
- PE38-LONG#2, 20µg/mL BLAST
- PE38-LONG#2, 100µg/mL BLAST
- PE38-SHORT#1, 20µg/mL BLAST
- PE38-SHORT#1, 100µg/mL BLAST
- PE38-SHORT#2, 20µg/mL BLAST
- PE38-SHORT#2, 100µg/mL BLAST
- pIB-LacZ CONTROL, 20µg/mL BLAST
- pIB-LacZ CONTROL, 100µg/mL BLAST

FIG.23



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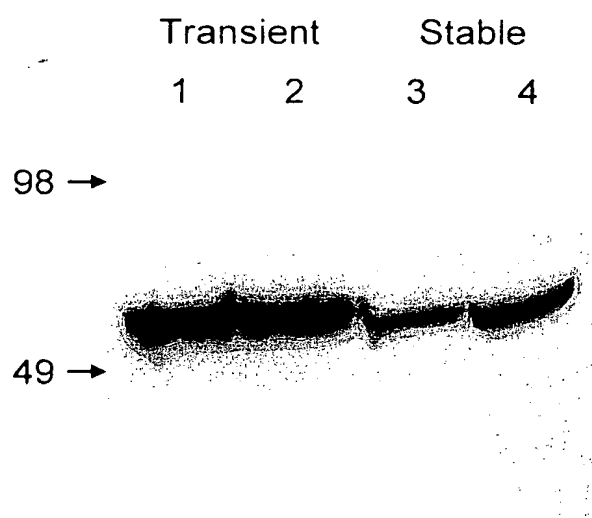


FIG.24

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Calmodulin TFIIs

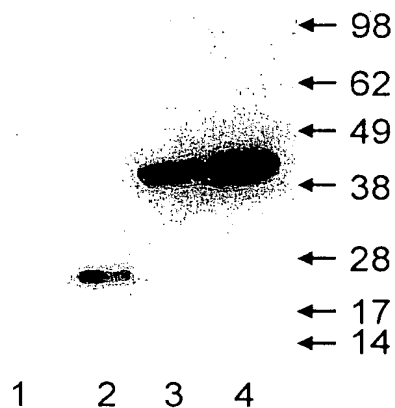


FIG.25A

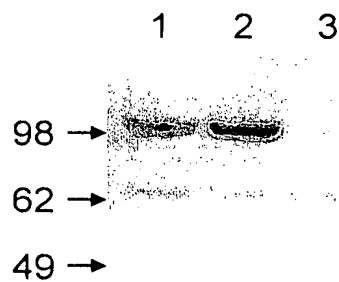


FIG.25B

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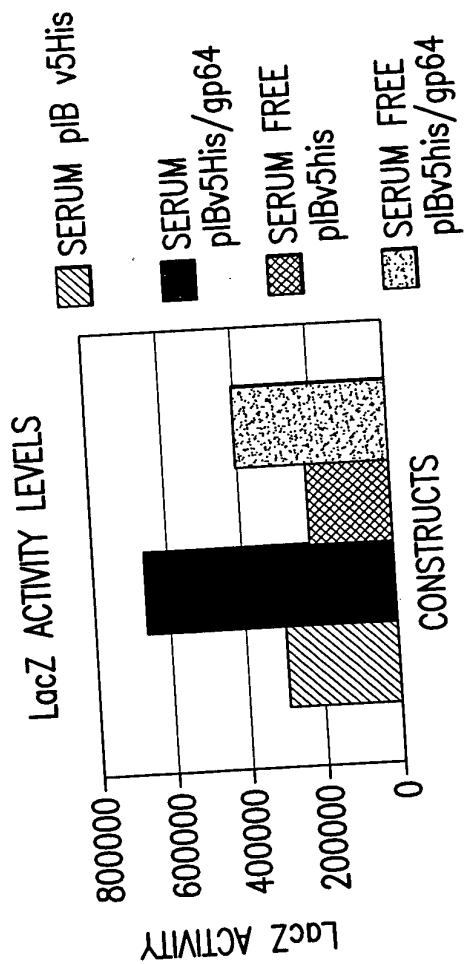
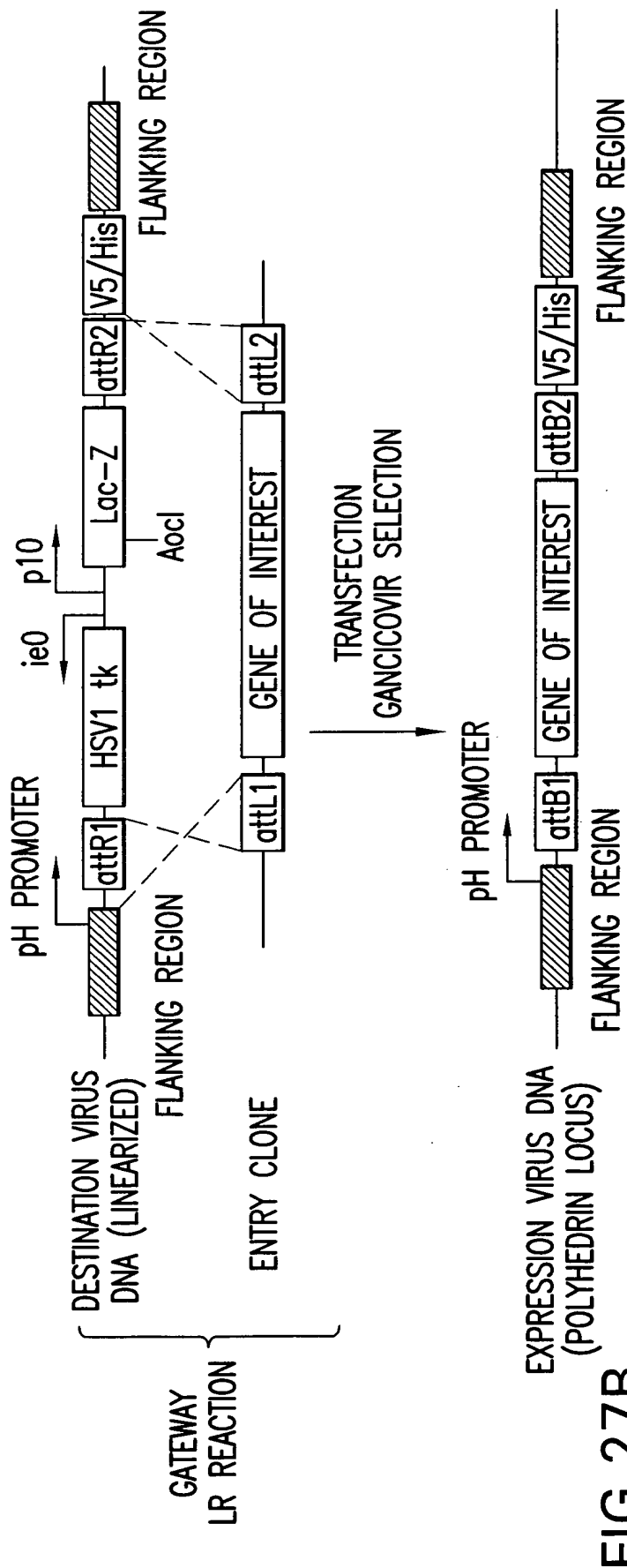
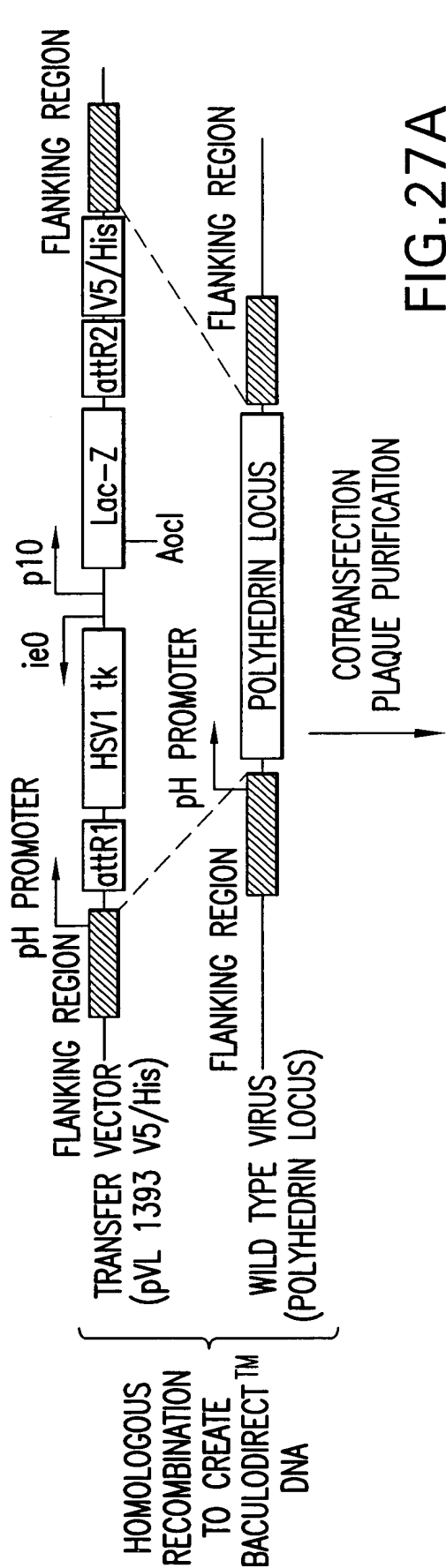


FIG.26

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# HTP PROTOCOL FOR USE WITH BACULODIRECT (TM)

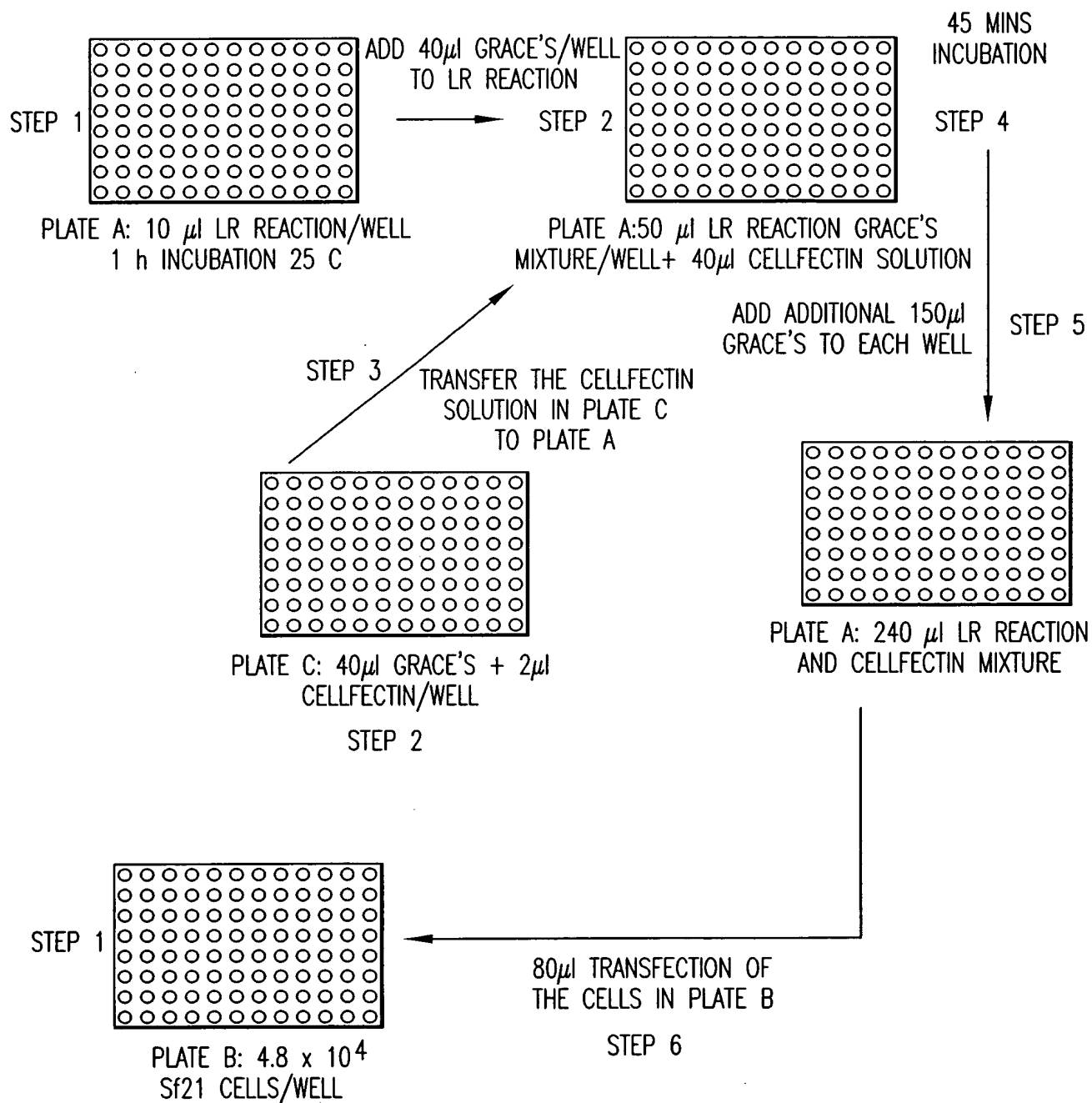


FIG.28

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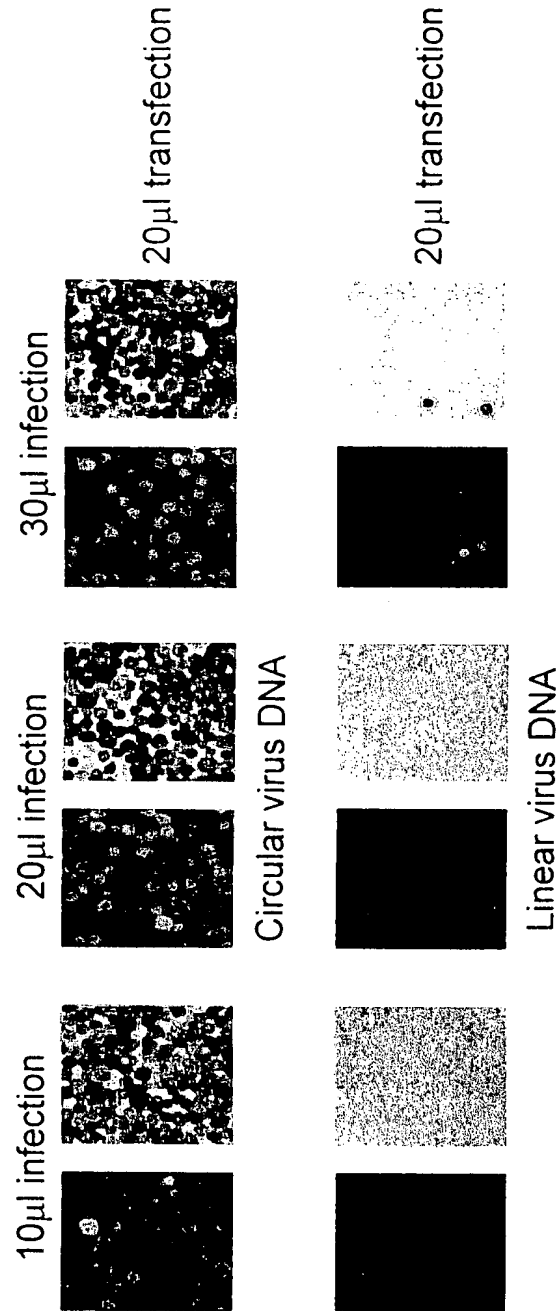


FIG. 29

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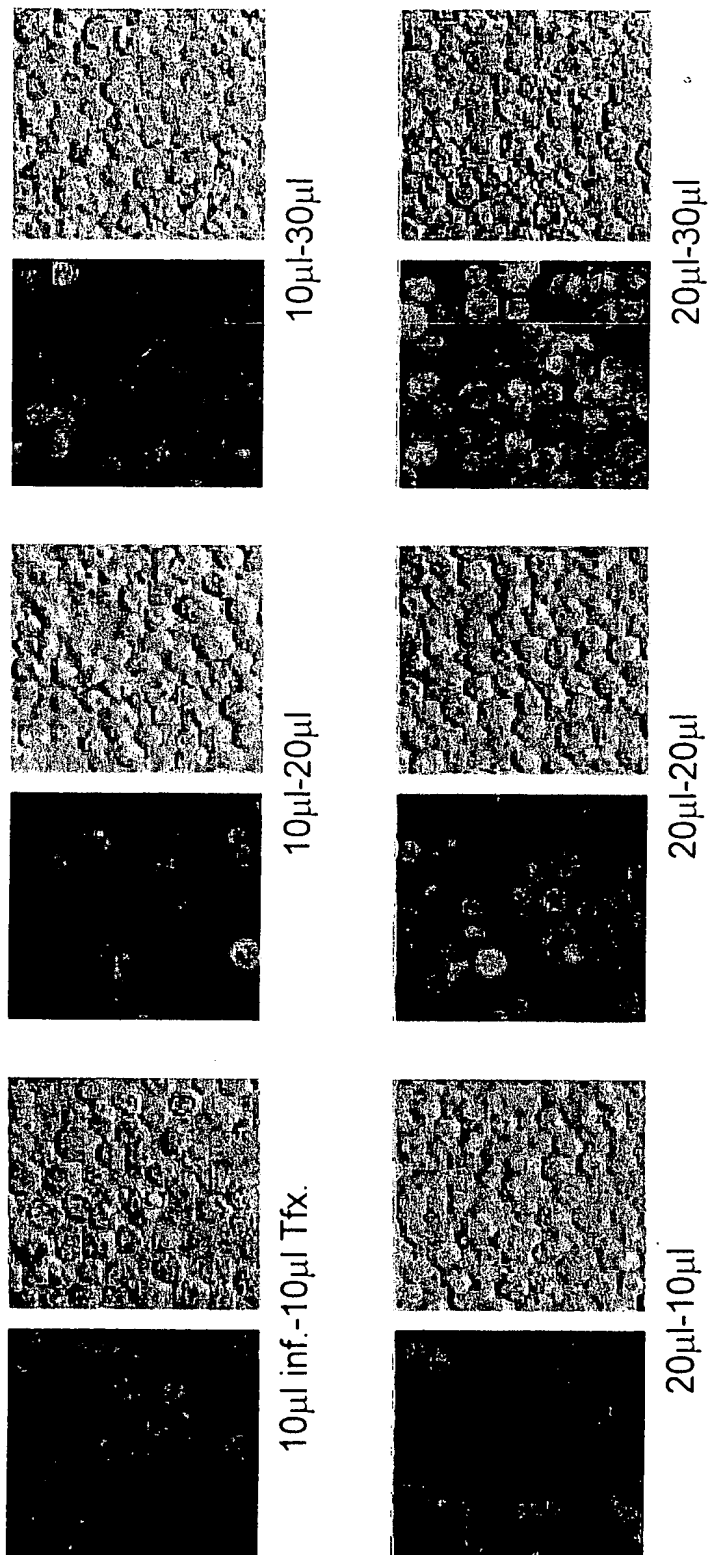


FIG.30

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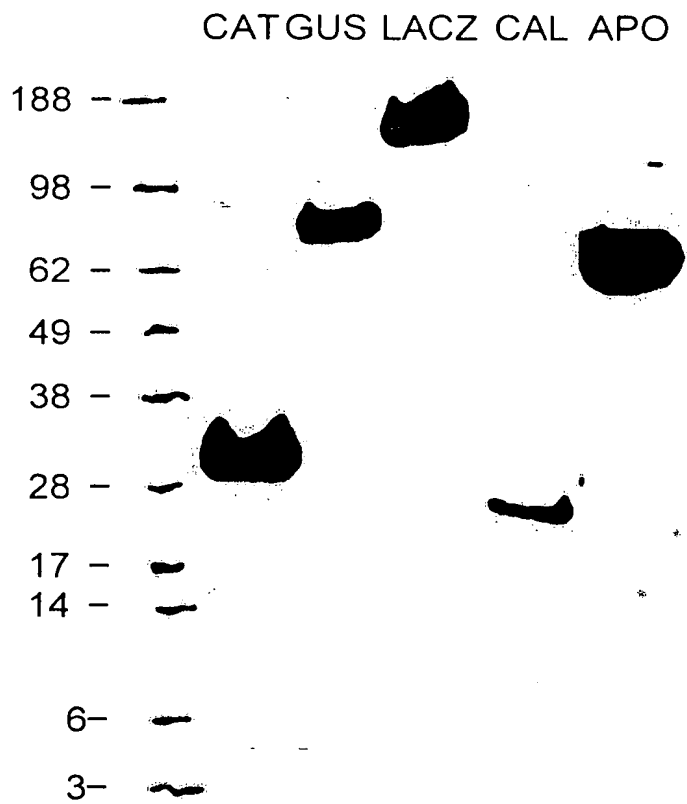


FIG.31



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VIRUS \ TITER pfu/ml	TRANSFECT	INFECT
BACULODIRECT™	$9.8 \times 10^6$	$6.9 \times 10^8$
BAC TO BAC	$6.9 \times 10^6$	$7.2 \times 10^8$
MAXBAC	N/A	$3.6 \times 10^8$

TITER COMPARISON OF THE THREE VIRUSES BY USING TCID<sub>50</sub>

VIRUS \ TITER pfu/ml	TRANSFECT	INFECT.
BACULODIRECT™	$6 \times 10^6$	$3 \times 10^8$
BAC TO BAC	$8 \times 10^6$	$5 \times 10^8$
MAXBAC	N/A	$3 \times 10^8$

TITER COMPARISON OF THE THREE VIRUSES BY USING PLAQUE ASSAY

FIG.32

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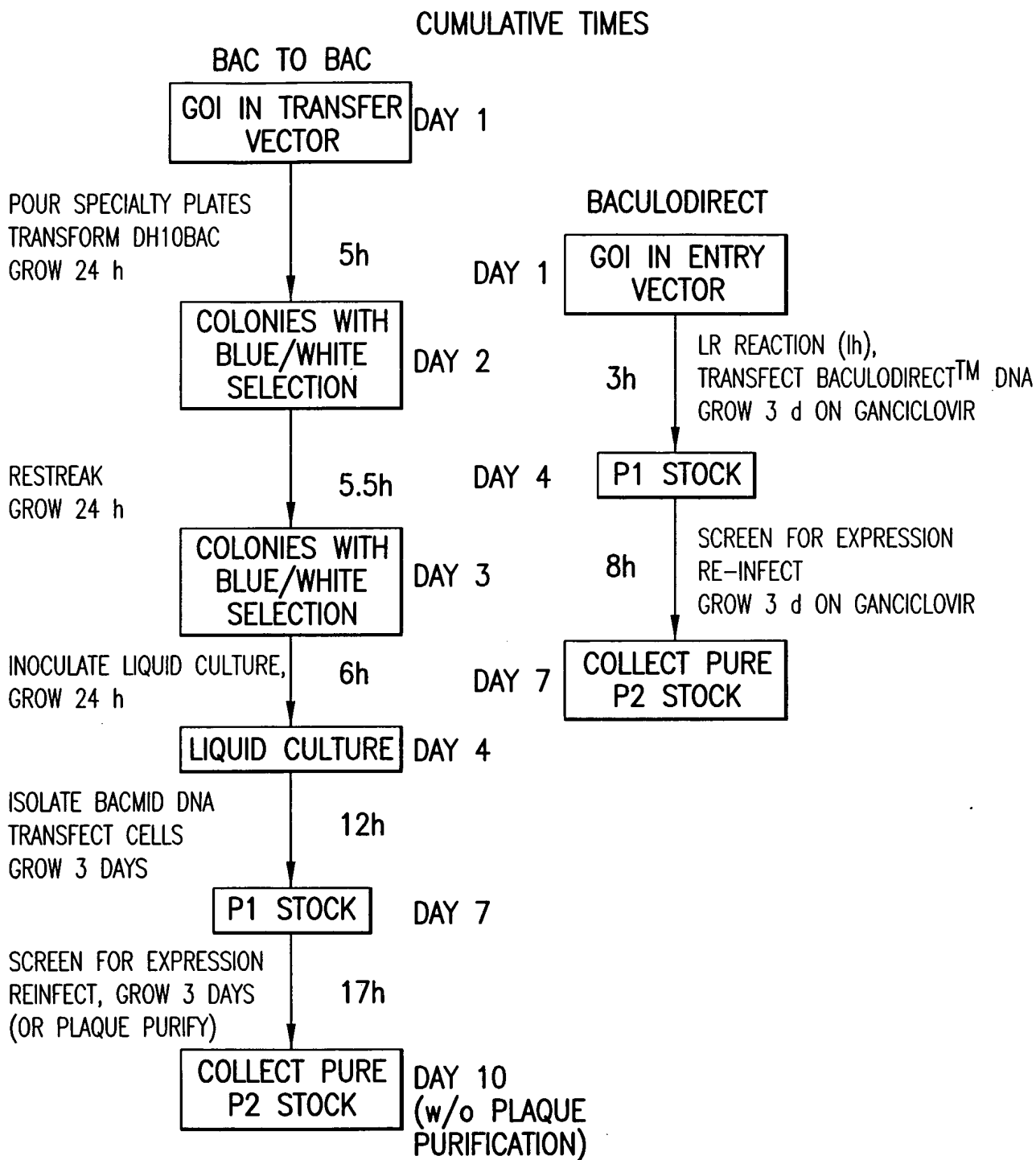


FIG.33

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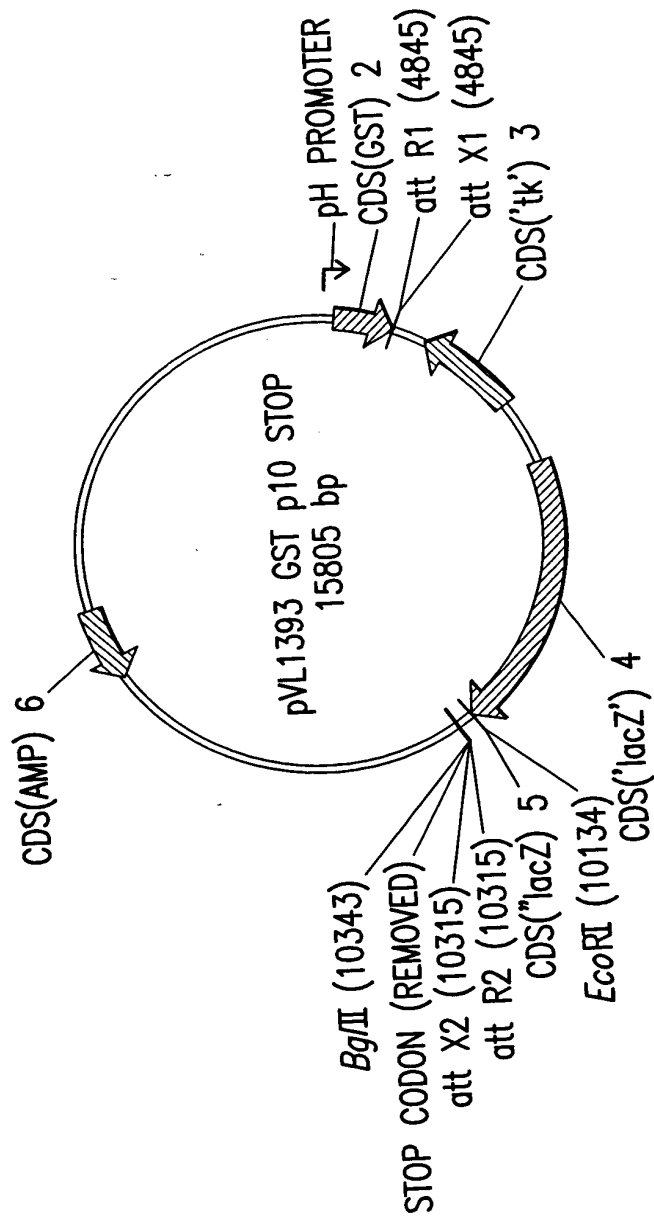


FIG.34

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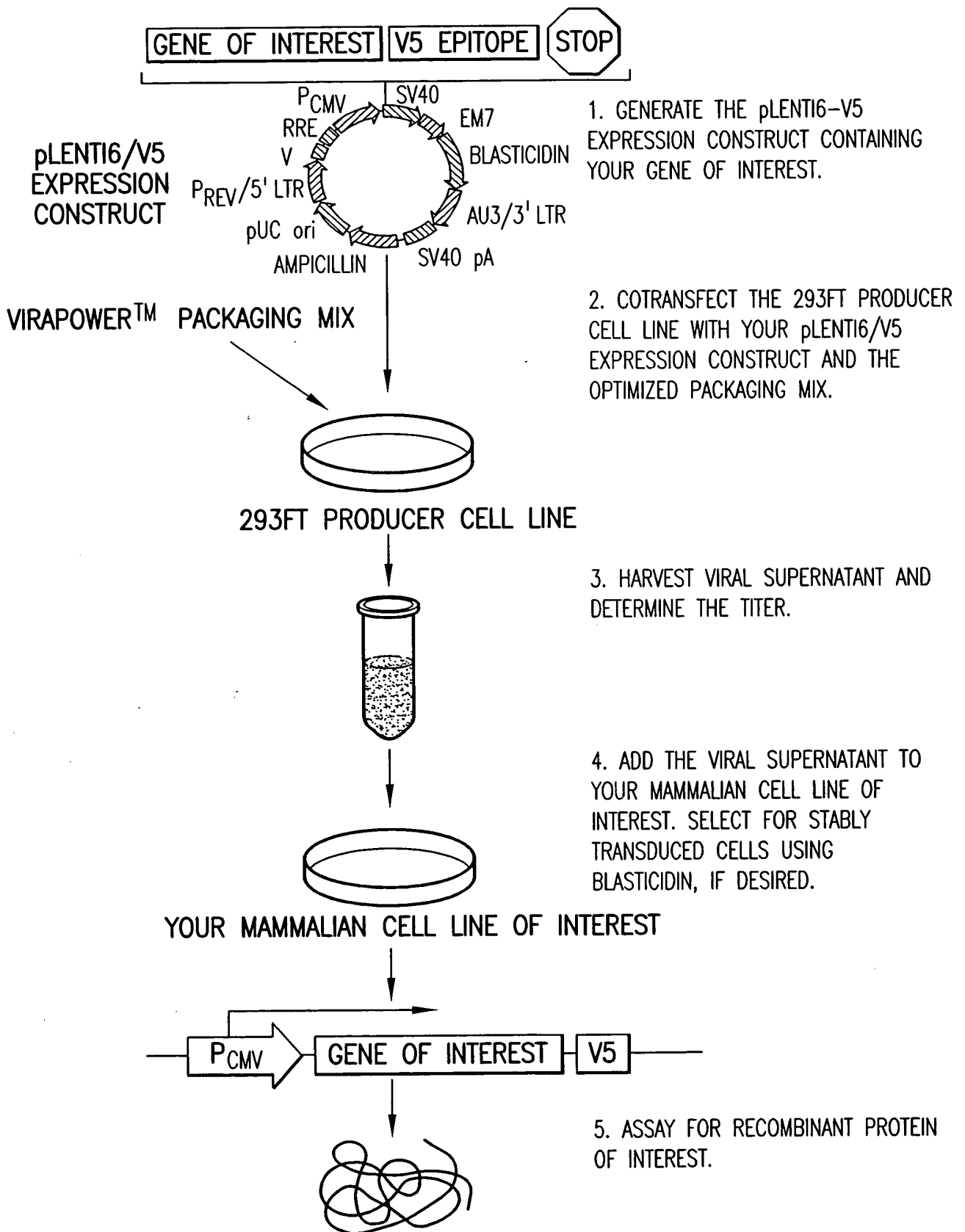


FIG.35

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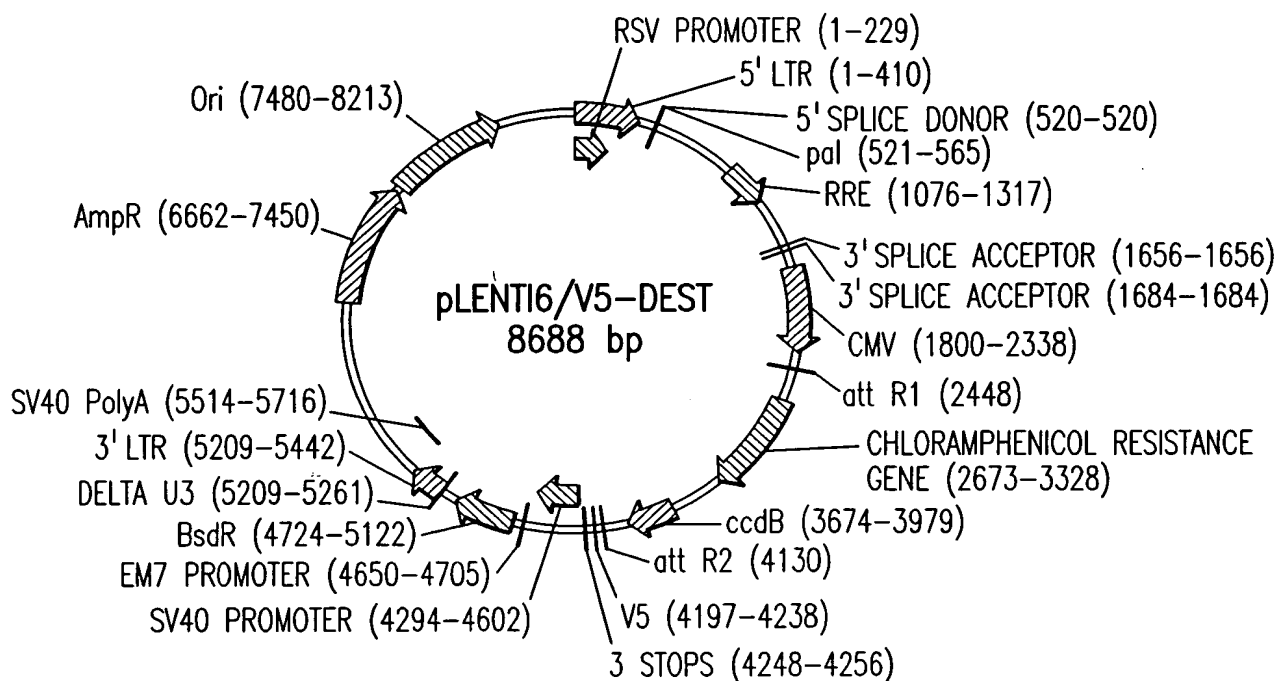


FIG.36A

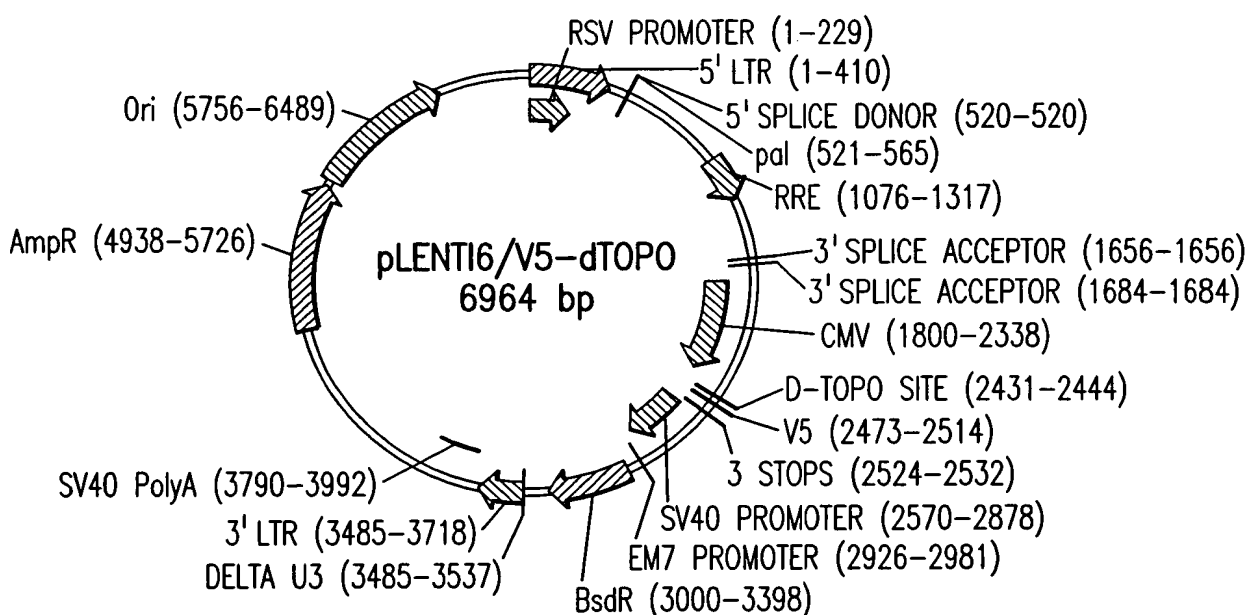


FIG.36B

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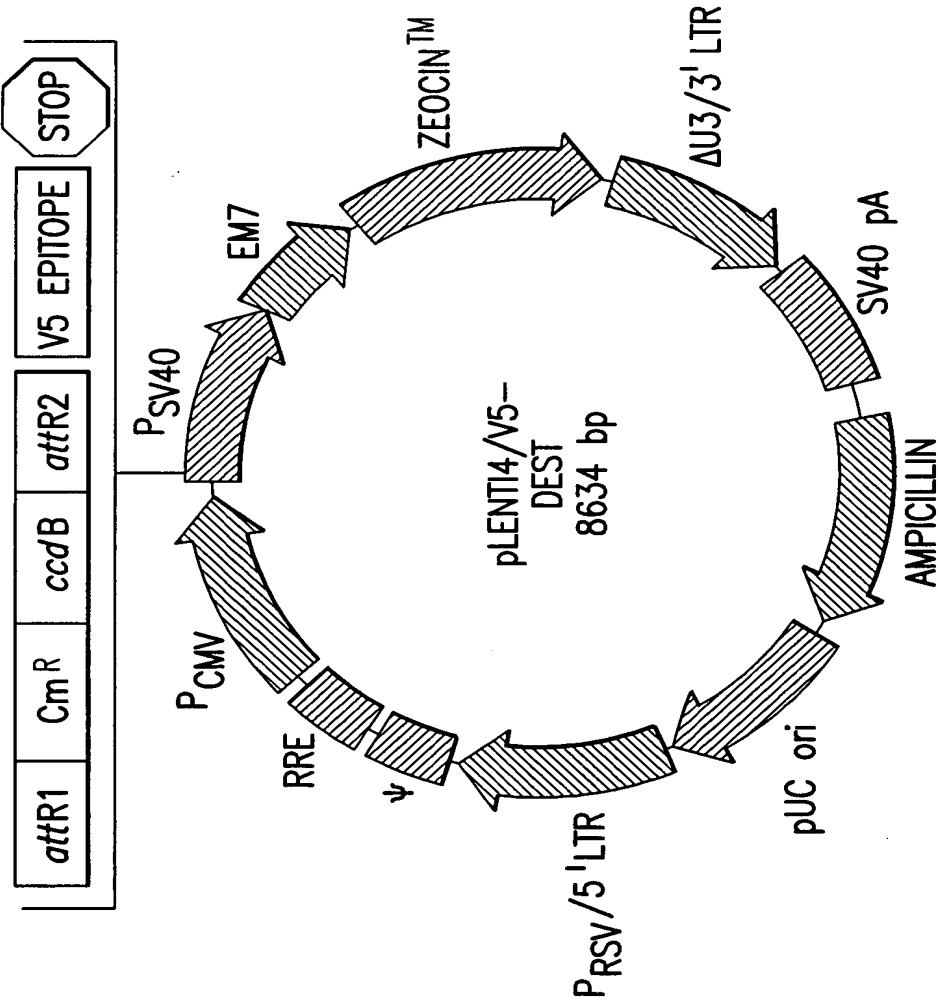


FIG.36C

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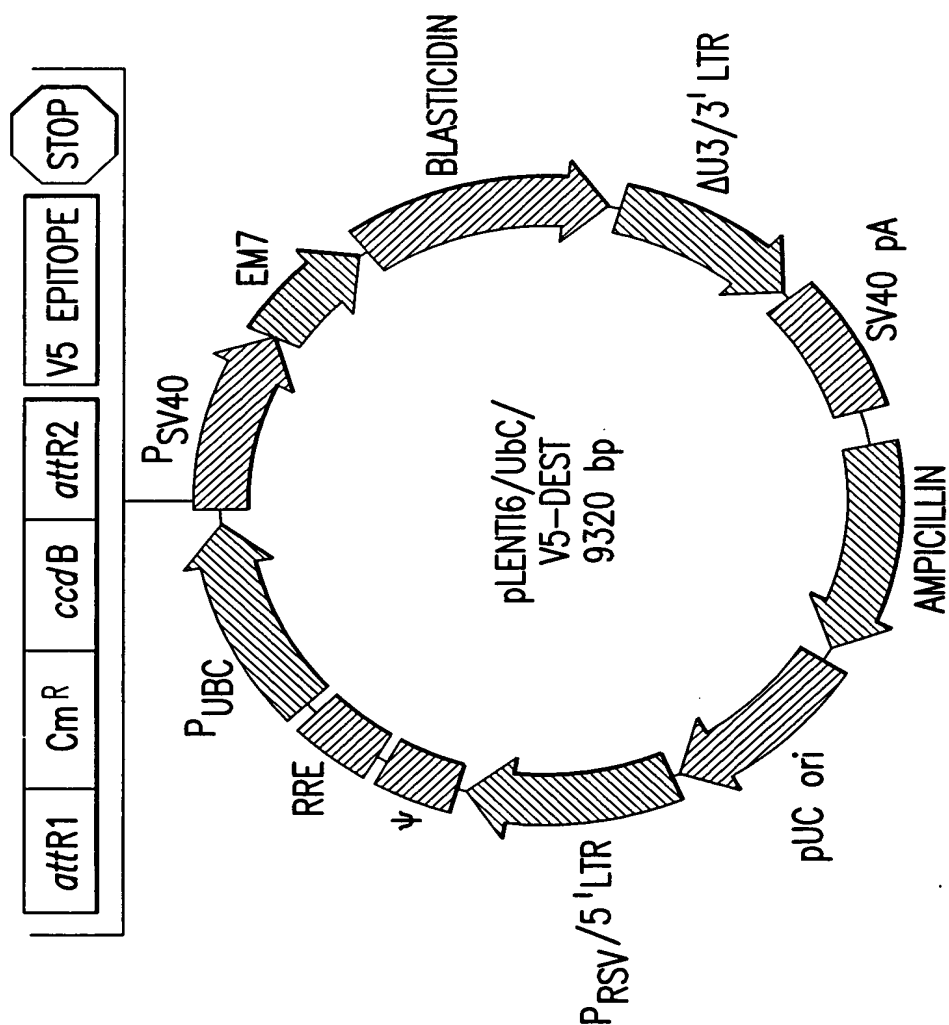


FIG.36D

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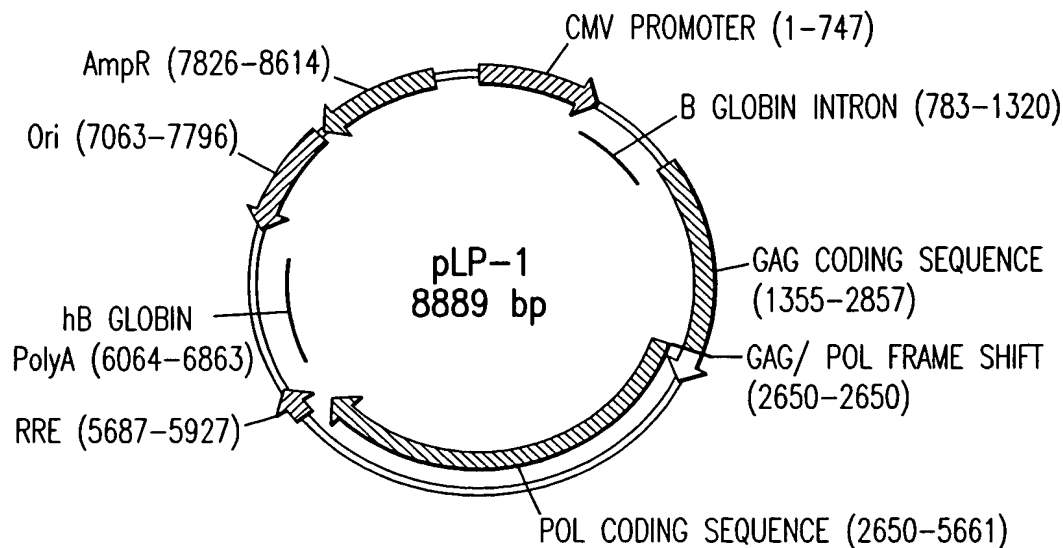


FIG.37A

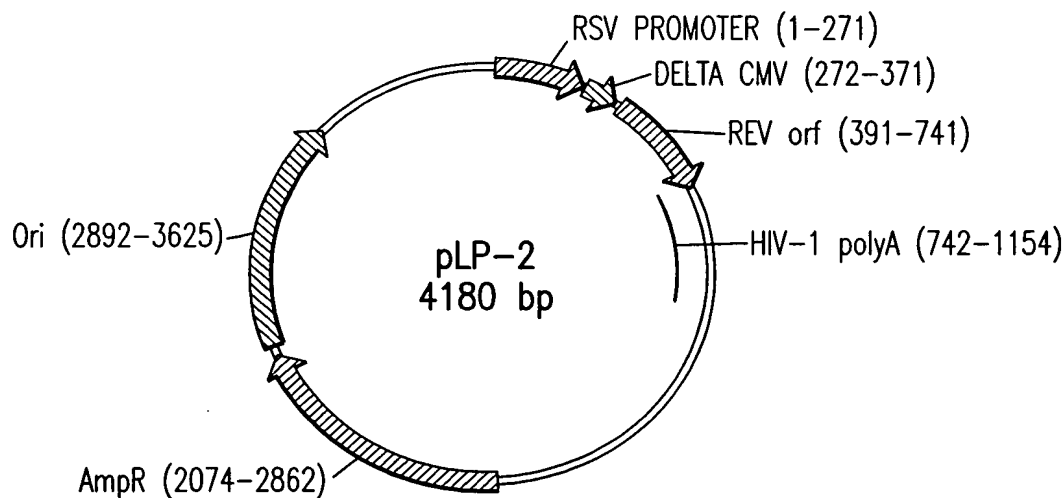


FIG.37B

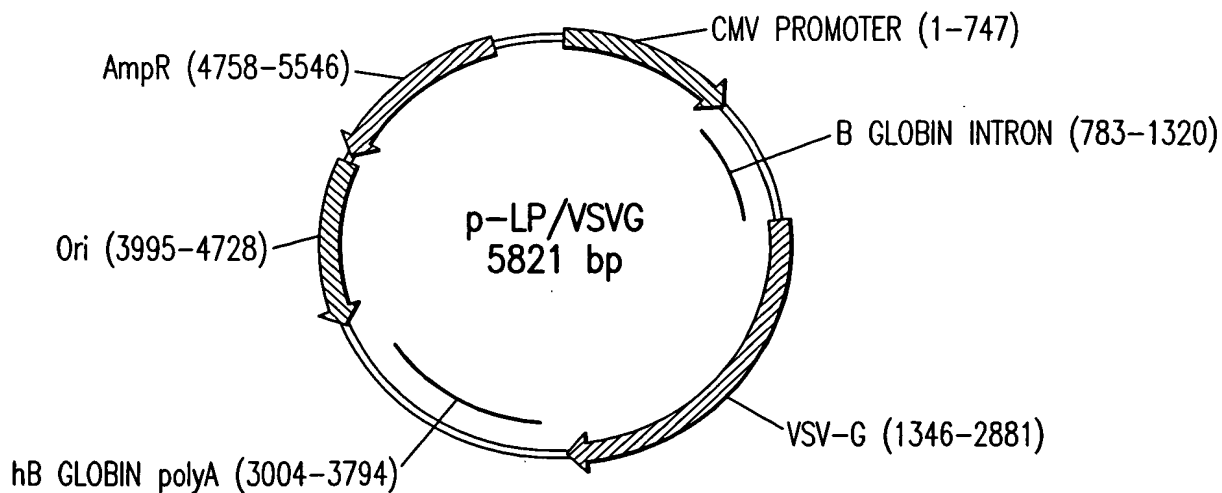


FIG.37C



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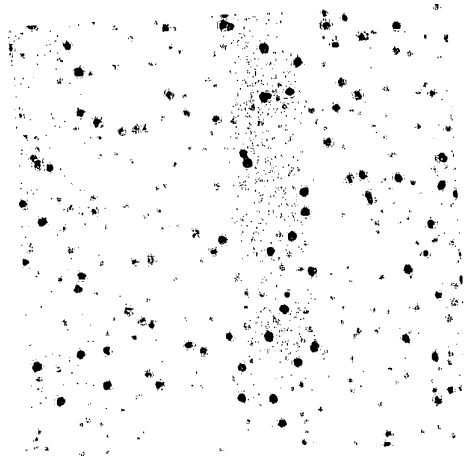


FIG.38A

[Bsd] IN PLATE	LR REACTION	
	DEST ALONE	DEST + CAT
NO Bsd	24	$320^1$ $(12/24 = 50\%)^2$
50 $\mu$ g/ml Bsd	0	$162$ $(24/24 = 100\%)^2$

<sup>1</sup>SEE PHOTO ABOVE

<sup>2</sup>PERCENTAGE OF CORRECT COLONIES

FIG.38B

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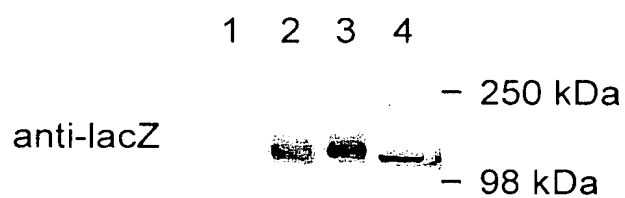


FIG.39A

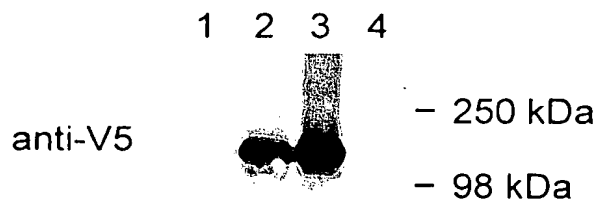


FIG.39B

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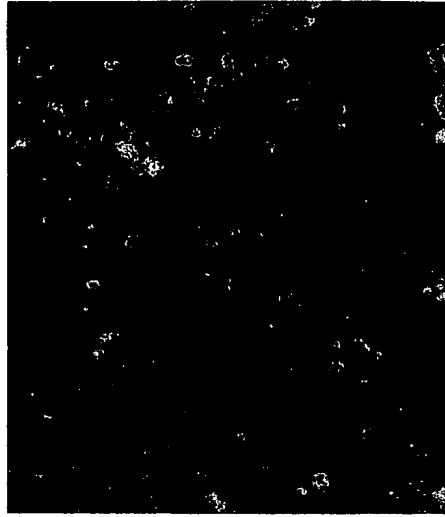
EXAMPLES OF PRODUCTION TITERS (Bsd<sup>R</sup> cfu/ml)

	EMPTY	LacZ	GFP	CAT	PKC
EXP 1	6 x 10 <sup>6</sup>	5 x 10 <sup>5</sup>	4 x 10 <sup>6</sup>	N.D.	N.D.
EXP 2	3 x 10 <sup>7</sup>	3 x 10 <sup>5</sup>	6 x 10 <sup>6</sup>	8 x 10 <sup>6</sup>	N.D.
EXP 3	7 x 10 <sup>6</sup>	6 x 10 <sup>5</sup>	2 x 10 <sup>6</sup>	1 x 10 <sup>7</sup>	3 x 10 <sup>6</sup>
AVG	1.4 x 10 <sup>7</sup>	4.7 x 10 <sup>5</sup>	4 x 10 <sup>6</sup>	9 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>

N.D. = NOT DETERMINED

FIG.40

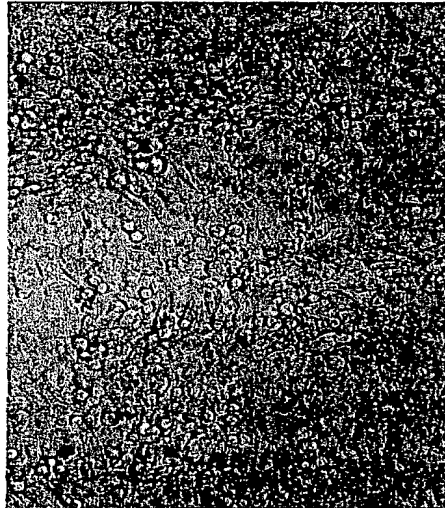
pLenti6/V5-dT/GFP



Fluorescent

FIG.41C

pLenti6/V5-dT/GFP



Brightfield

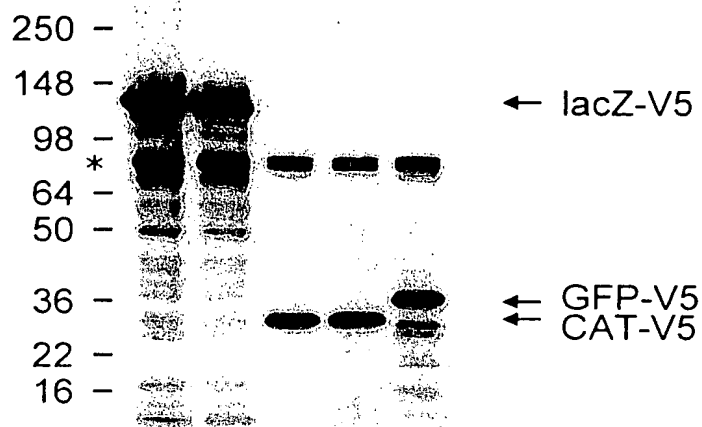
FIG.41B

pLenti6/V5-GW/lacZ



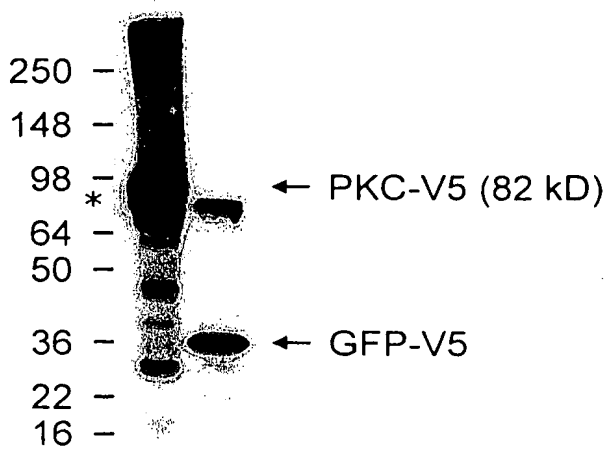
FIG.41A

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lacZ lacZ CAT CAT GFP

FIG.42A



PKC GFP

FIG.42B

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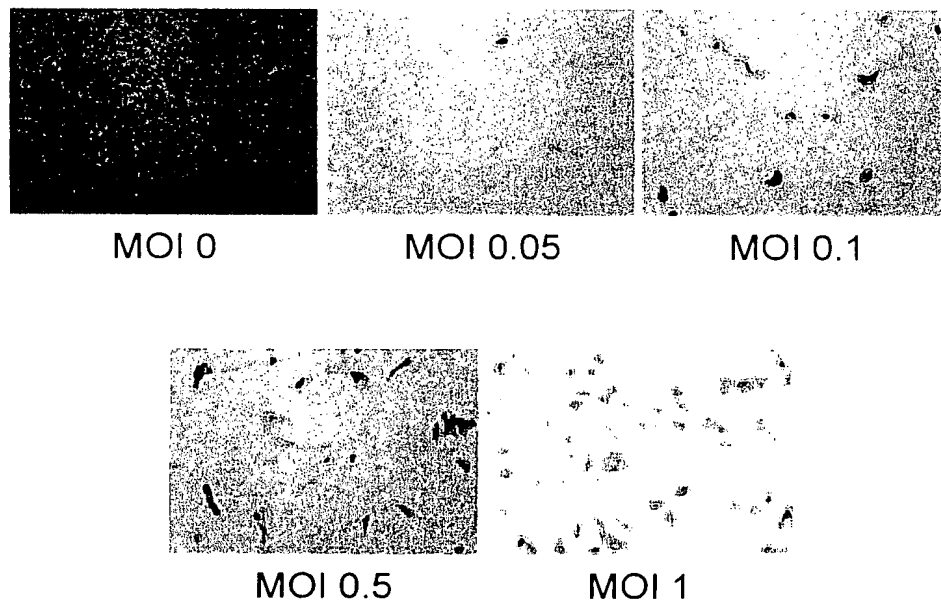


FIG.43A

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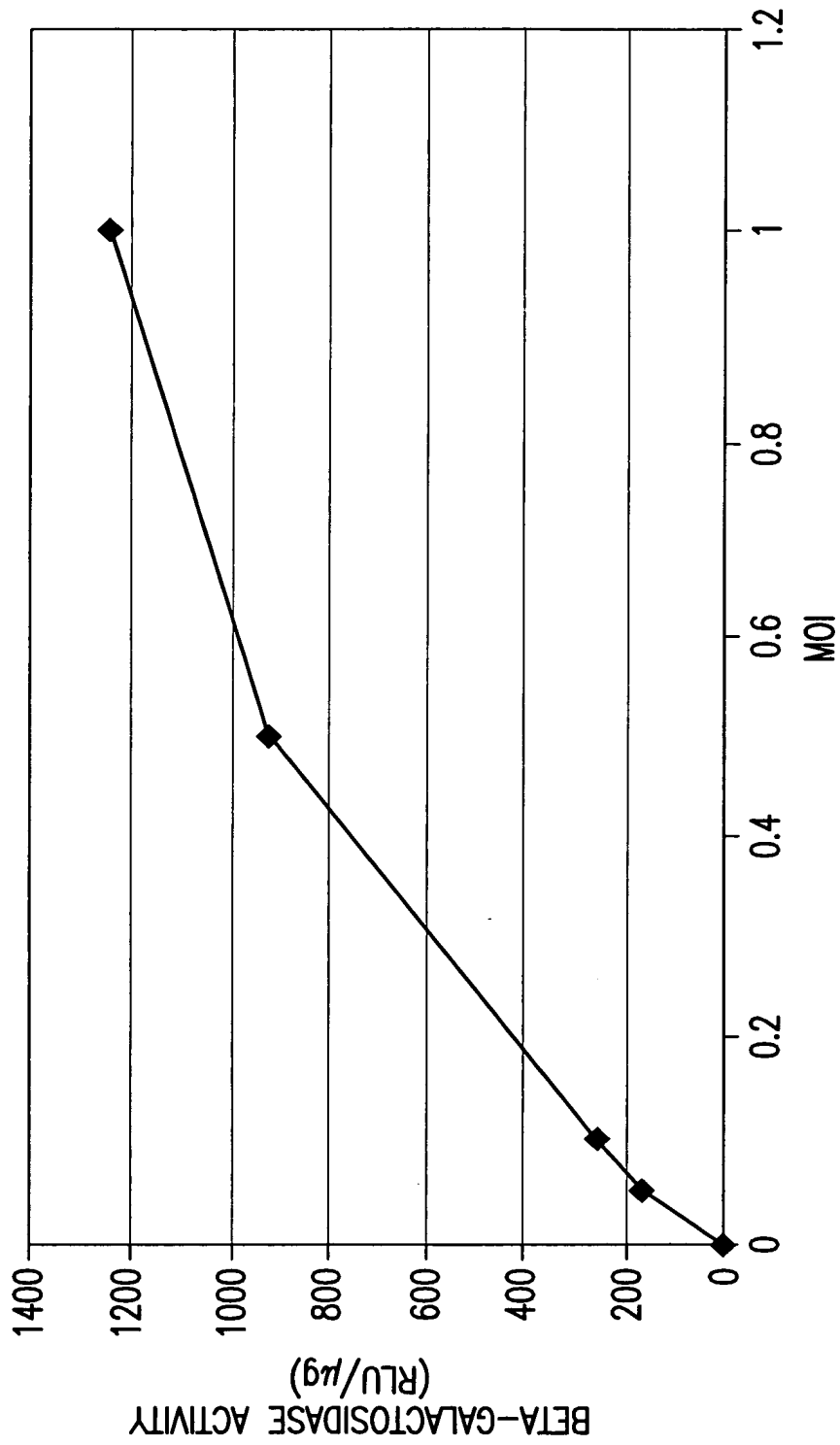


FIG. 43B

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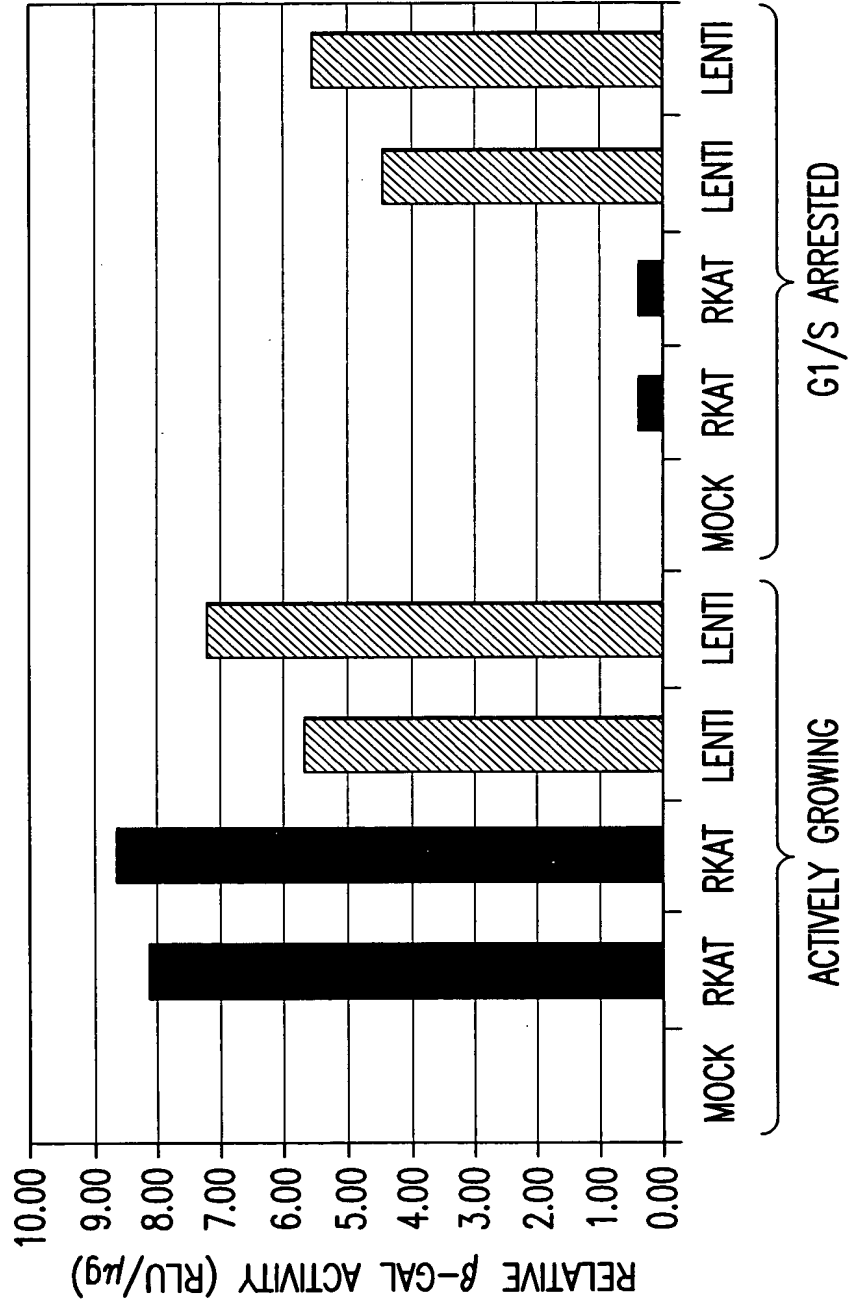
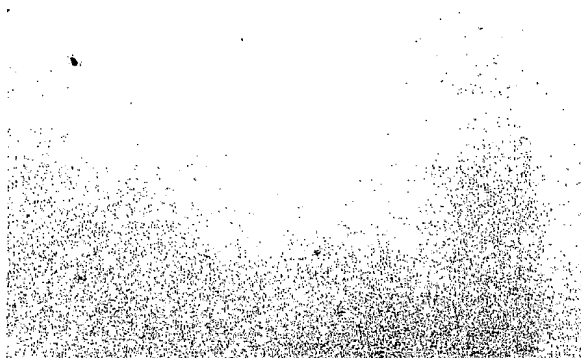


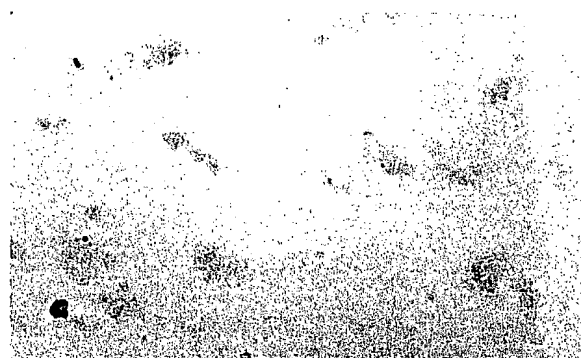
FIG. 44A



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rKAT6-lacZ retrovirus



pLenti6/V5-GW/lacZ

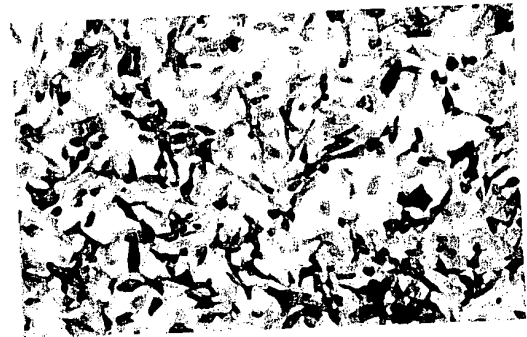
FIG.44B

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10 days



rKAT6-lacZ retrovirus



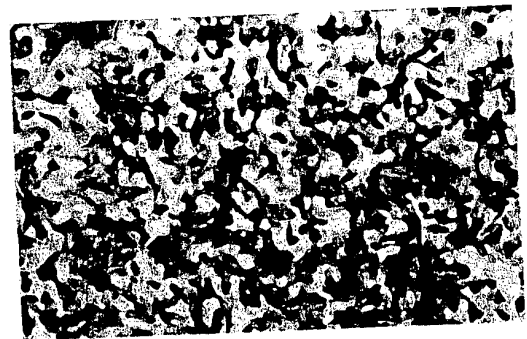
pLenti6/V5-GW/lacZ lentivirus

FIG.45A

6 weeks



rKAT6-lacZ retrovirus



pLenti6/V5-GW/lacZ lentivirus

FIG.45B

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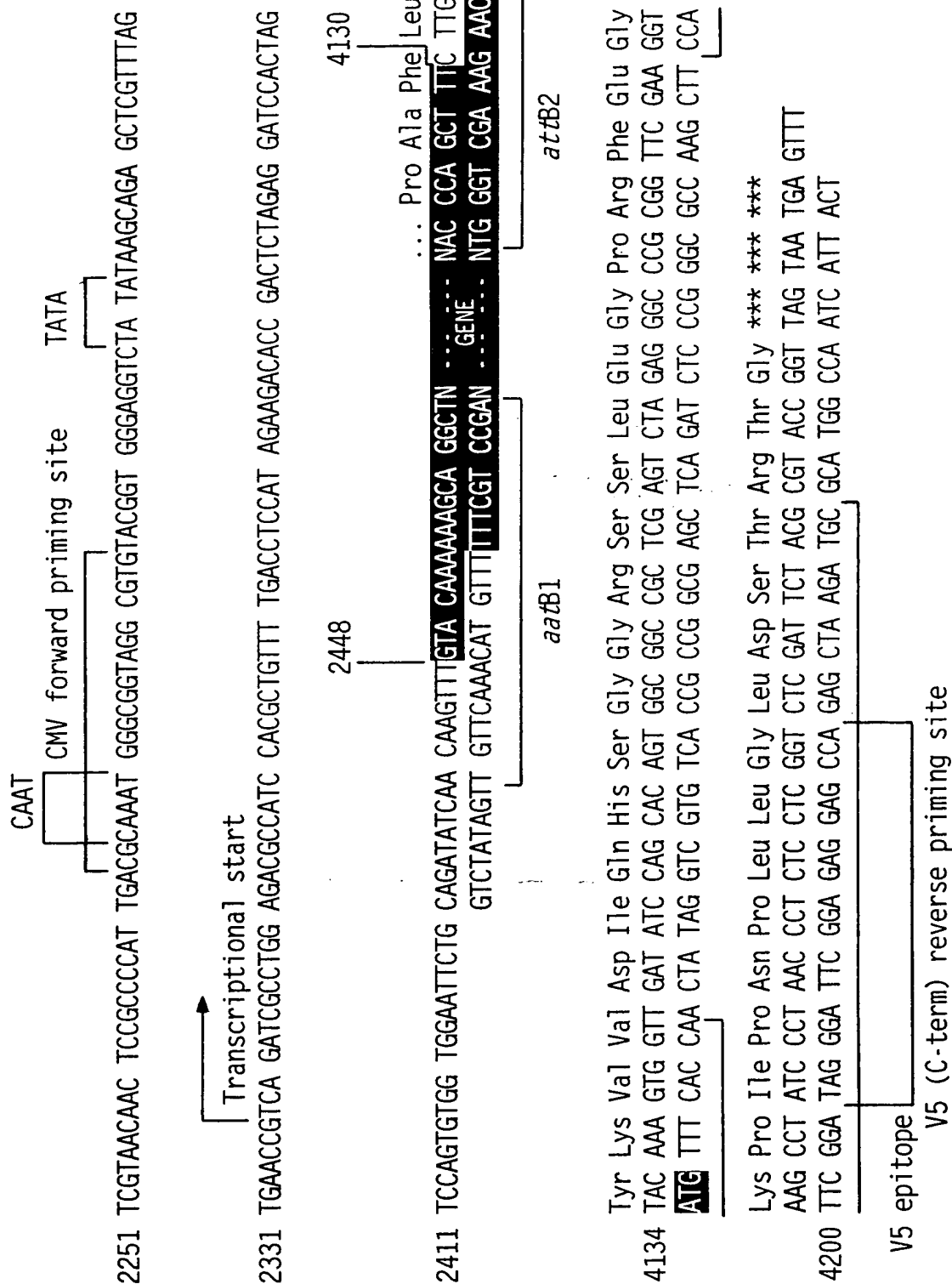


FIG. 46A

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UB forward priming site

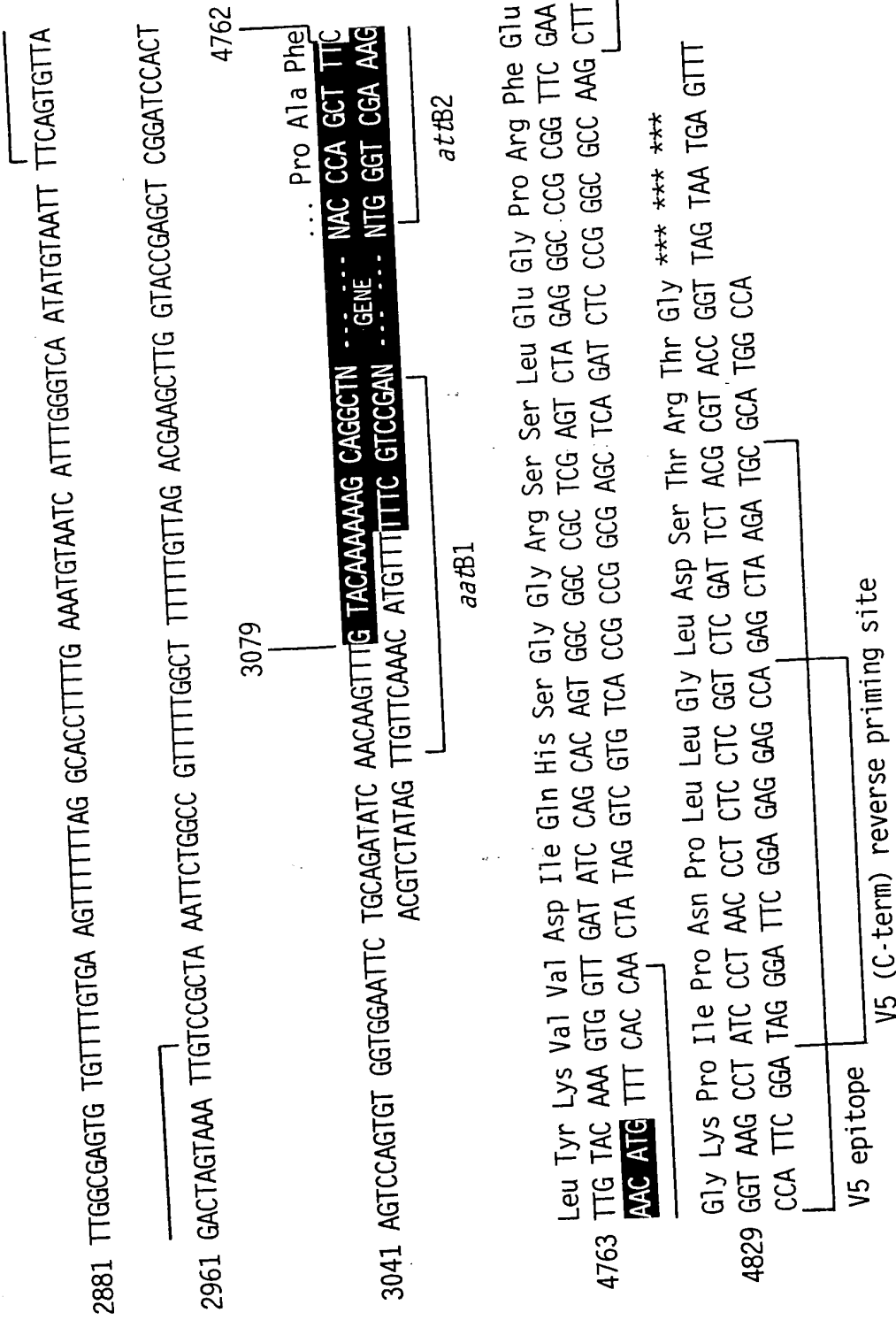


FIG.46B

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5' end of *U<sub>3</sub>* promoter

1796 CCGATCTGGC CTCGCGCGCG GGTTTTGGCG CTCCCGCGG GCGCCCCCCT CCTCAGGCG AGCGCTGCCA CGTCAGACGA

1876 AGGGCGCAGG AGCGTCCCTGA TCCTTCGCGC Sp 1 GGGACGCTCA GGACAGCGGC CCGCTGCTCA TAAGACTCGG CCTTAGAACC

1956 CCAGTATCAG CAGAAGGACA TTTTAGGACG GGAAGTGGGT GACTCTAGGG CACTGGTTTT CTTTCCAGAG AGCGGAACAG

2036 GCGAGGAAAA GTAGTCCCTT CTCGGCGATT CTGCGGAGGG ATCTCCGTGG Sp 1 GCGGTGAAC GCCGATGATT ATATAAGGAC

2116 GCGCCGGGTG TGGCACAGCT AGTTCCGTGC CAGCCGGGAT TTGGTCCGG GTTCTTGTT GTGGATCGCT GTGATCGTCA

Start of Transcription

Exon 1

5' end of Intron 1

2196 CTGGTGAGT AGCGGGCTGC TGGGCTGGCC GGGGCTTTTCG TGGCCGCCGG GCCGCTCGGT GGGACGGAAG CGTGTGGAGA

2276 GACCGCCAAG GGCTGTAGTC TGGTCCGG AGCAAGGTG CCCTGAACTG GGGGTGGGG GGAGCGCAGC AAAATGGCGG

2356 CTGTTCCCGA GTCTTGAATG GAAGACGCTT GTGAGGCGGG CTGTGAGGTC GTTGAAACAA GGTGGGGGGC ATGGTGGCGG

FIG. 46C

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2436 GCAAGAACCC AAGGTCTTGA GGCCTTCGCT AATGCGGGAA AGCTCTTATT CGGGTGAGAT GGGCTGGGC ACCATCTGGG  
2516 GACCCTGACG TGAAGTTTGT CACTGACTGG AGAACTCGGT TTGTCGTCTG TTGCGGGGC GGCAGTTATG CCGTGCCGTT  
2596 GGGCAGTGCA CCCGTACCTT TGGGAGCGG CGCCCTCGTC GTGTCGTGAC GTCACCCGTT CTGTTGGCTT ATAATGCAGG  
2676 GTGGGGCCAC CTGCCGGTAG GTGTGCGGTA GGCCTTTCTC CGTCGCAGGA CGCAGGGTTC GGGCCTAGGG TAGGCTCTCC  
2756 TGAATCGACA GGCGCCGGAC CTCTGGTGAG GGGAGGGATA AGTGAGGCGT CAGTTTCTTT GGTCGGTTTT ATGTACCTAT  
2836 CTTCCTAAGT AGCTGAAGCT CCGGTTTTGA ACTATGCGCT CGGGTTGGC GAGTGTGTTT TGTGAAGTTT TTTAGGCACC  
2916 TTTTGAAATG TAATCATTG GGTCATATG TAATTTTCAG TGTTAGACTA GTAAATTGTC CGCTAAATTC TGGCCGTTTT

UB Forward priming site

3' end of Intron 1  
2996 TGGCTTTTT GTTAGACGAA GCTTGG....  
5' end of Exon 2

FIG.46D

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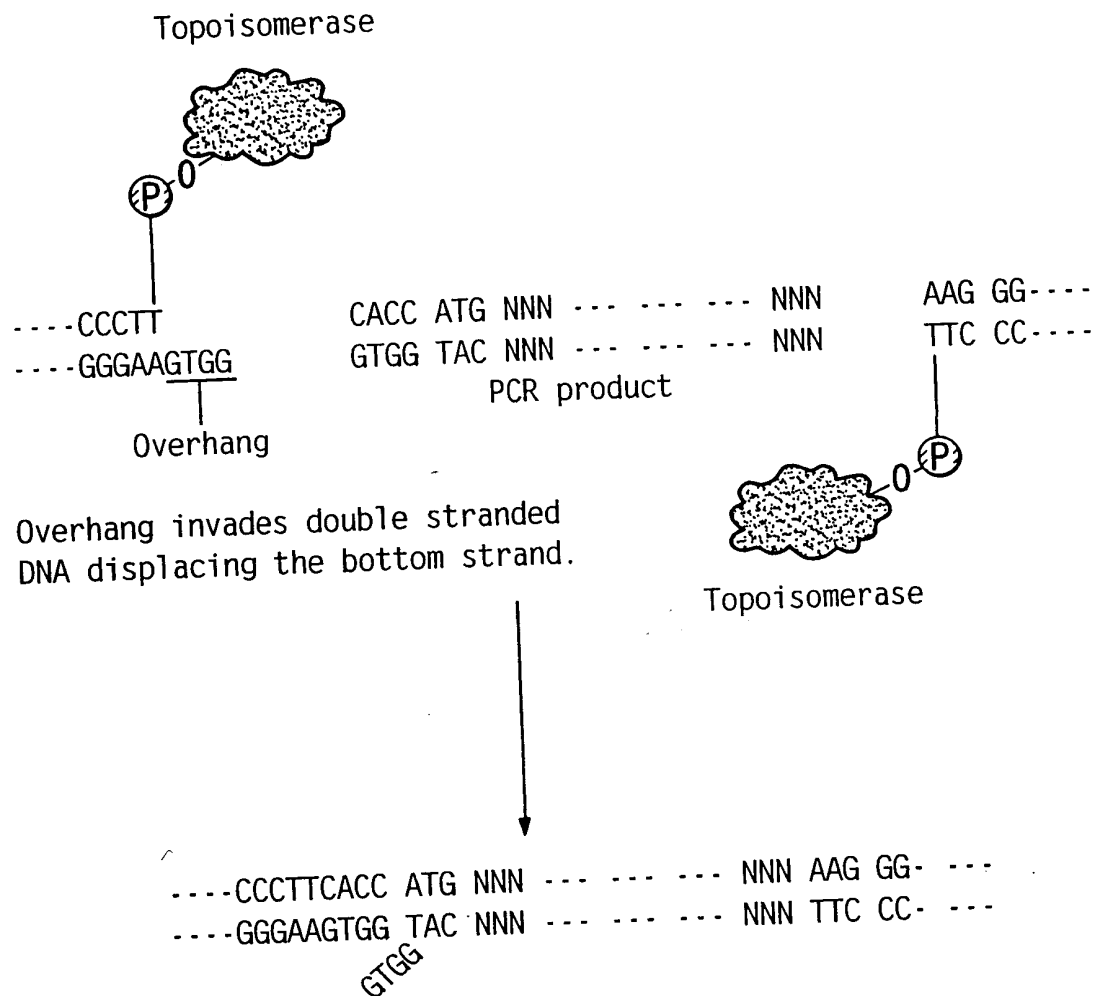


FIG.47

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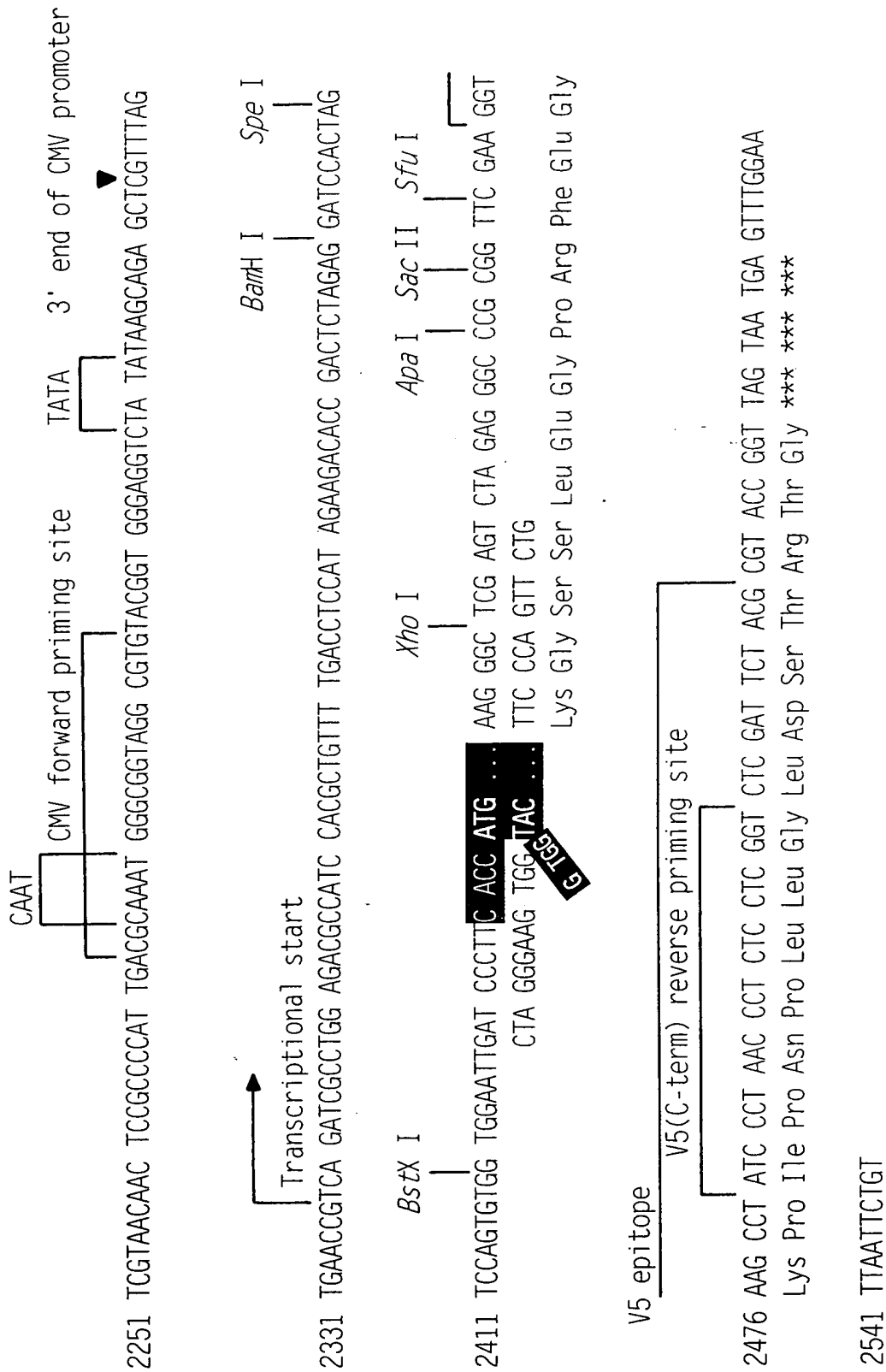


FIG.48



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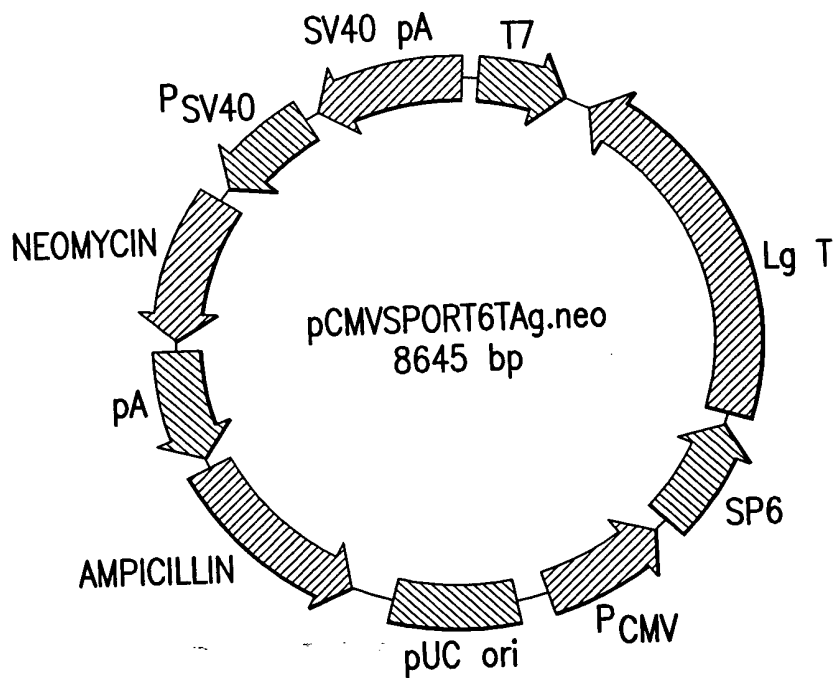


FIG.49

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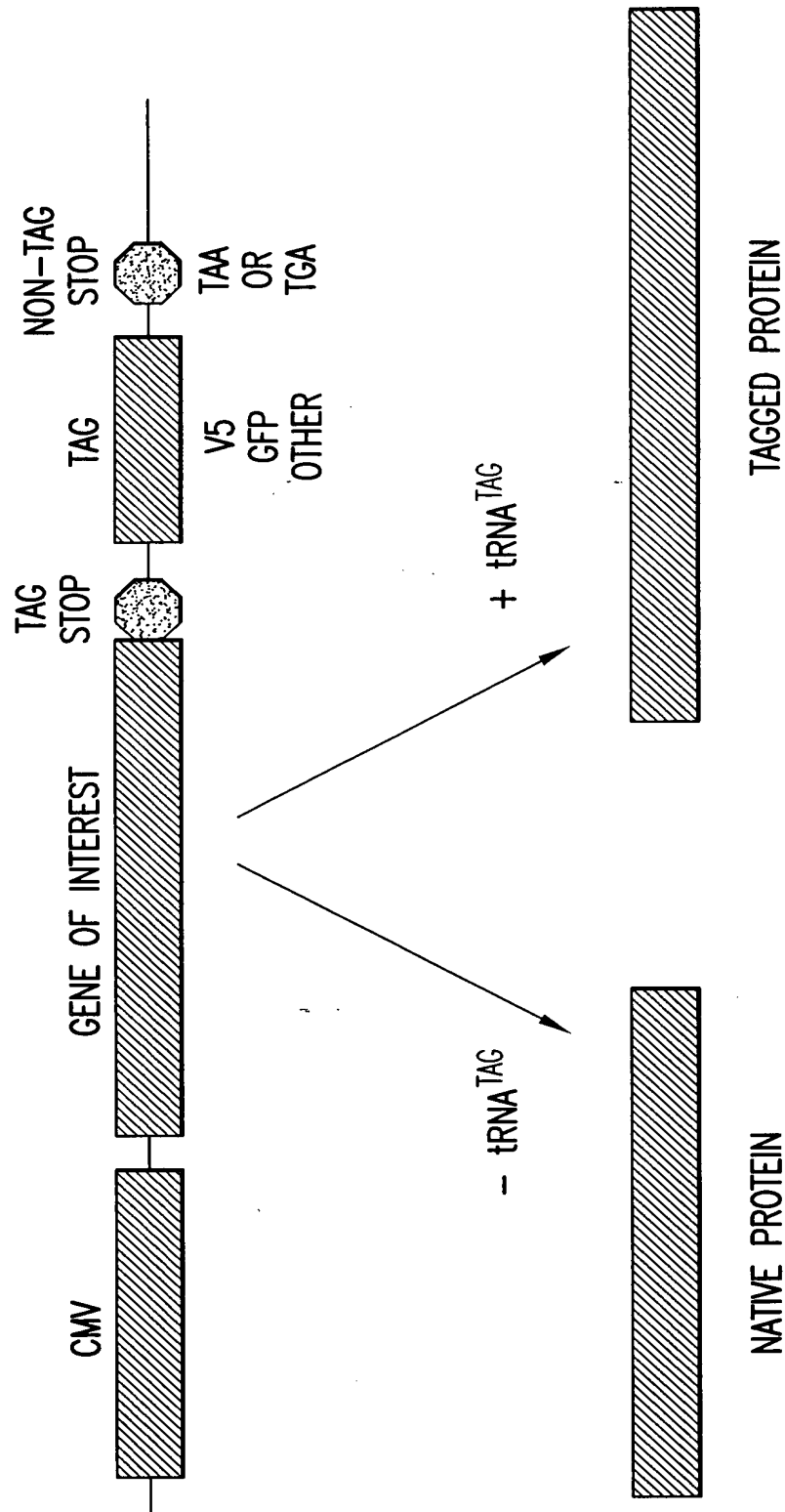


FIG.50

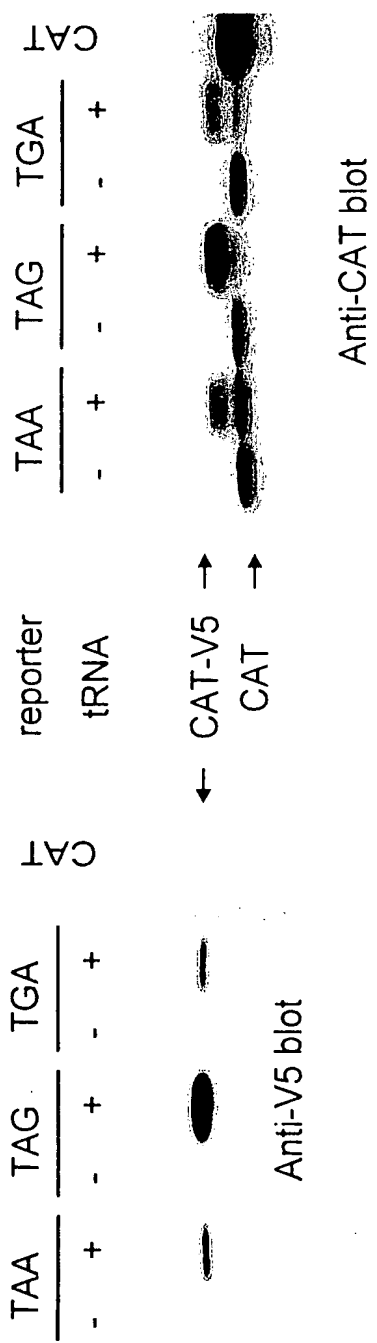


FIG.51A

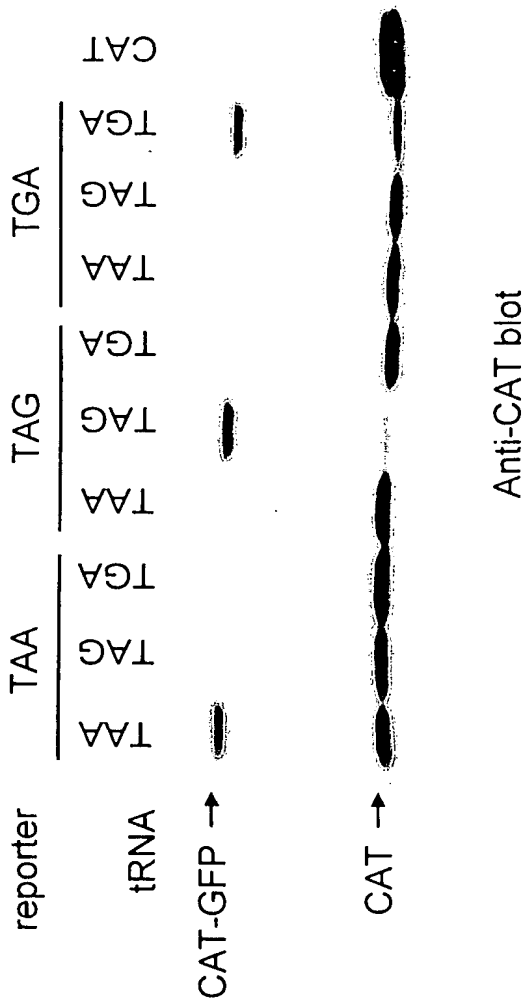


FIG.51B

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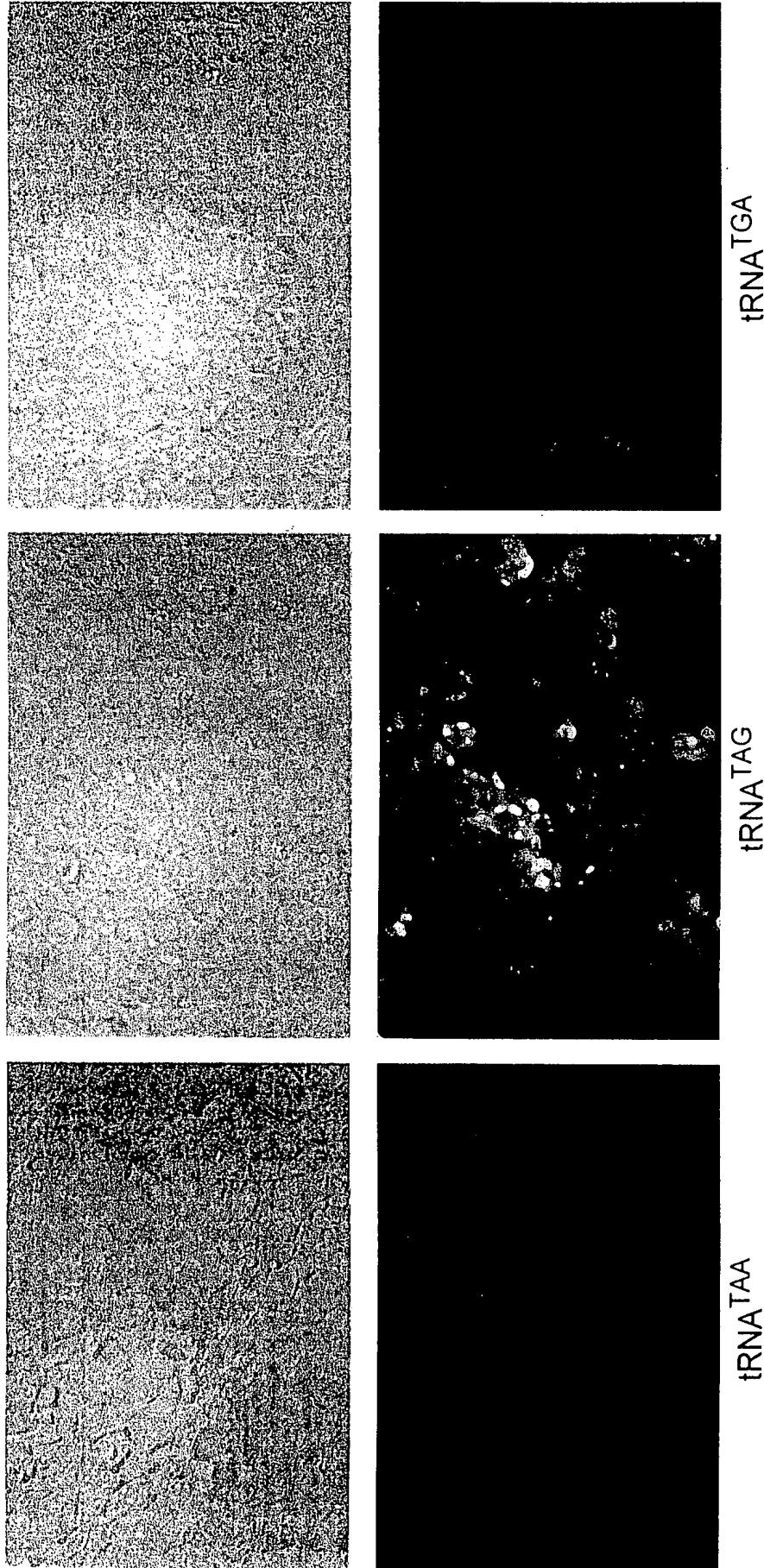


FIG.52

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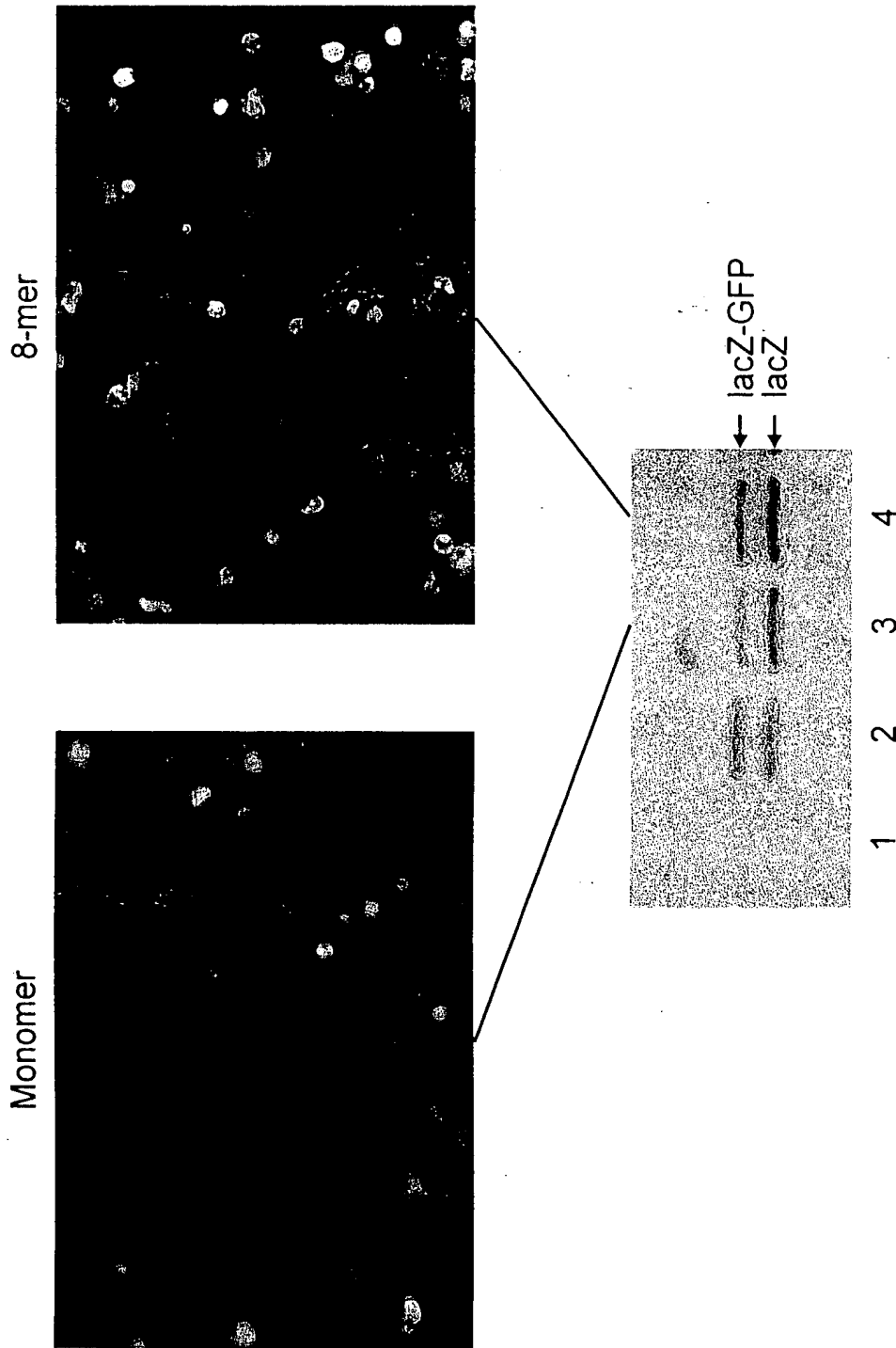
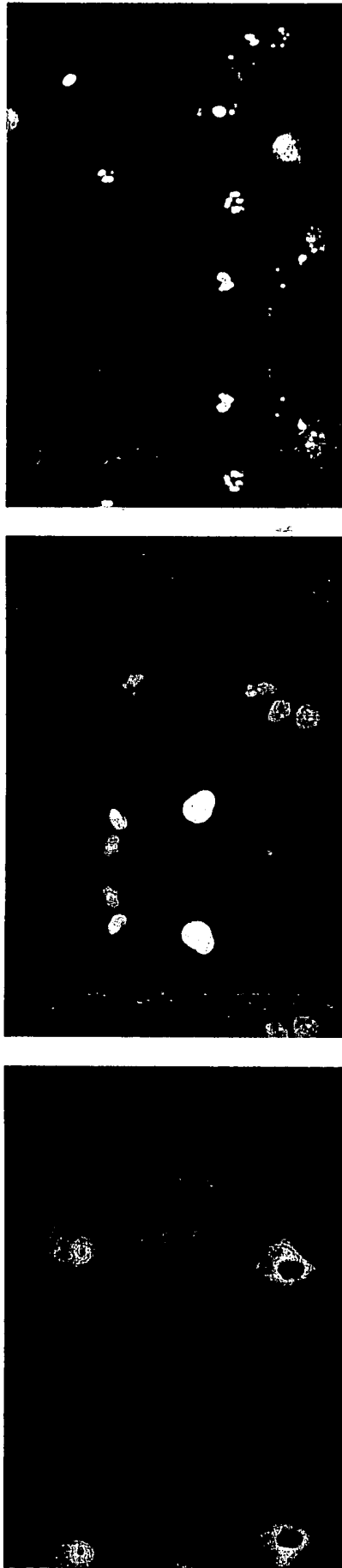


FIG. 53

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ORF12 (BC000141)

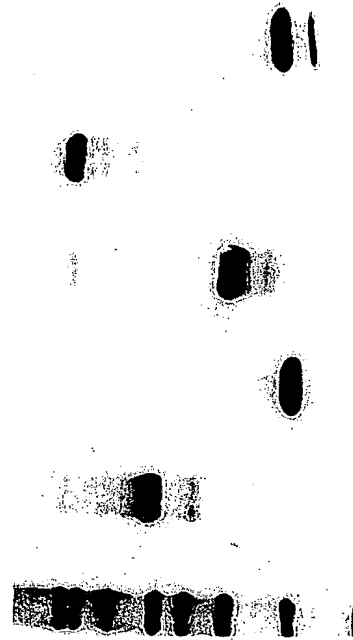
ORF7 (BC000997)

ORF6 (BC003357)

GFP-V5

12	6	7	lacZ
-	+	-	+
-	-	+	-
-	+	-	+

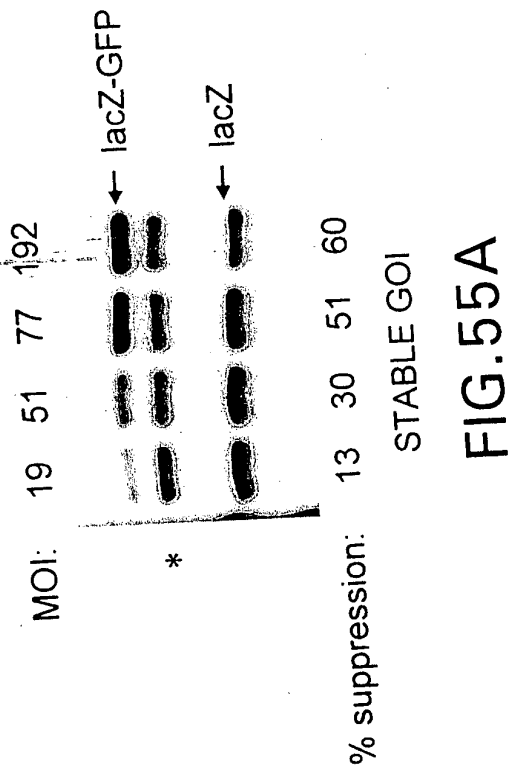
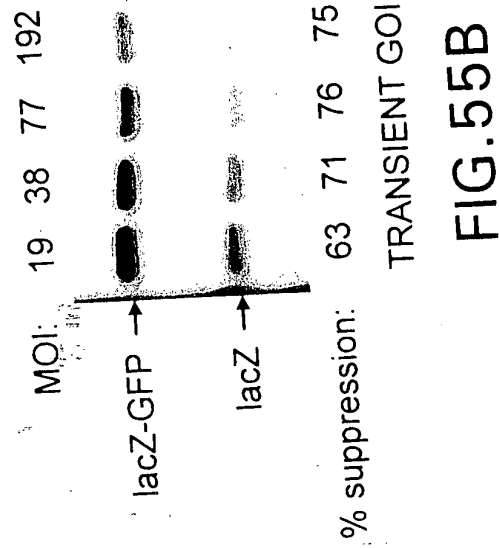
tRNA:



Anti-V5 blot

FIG. 54

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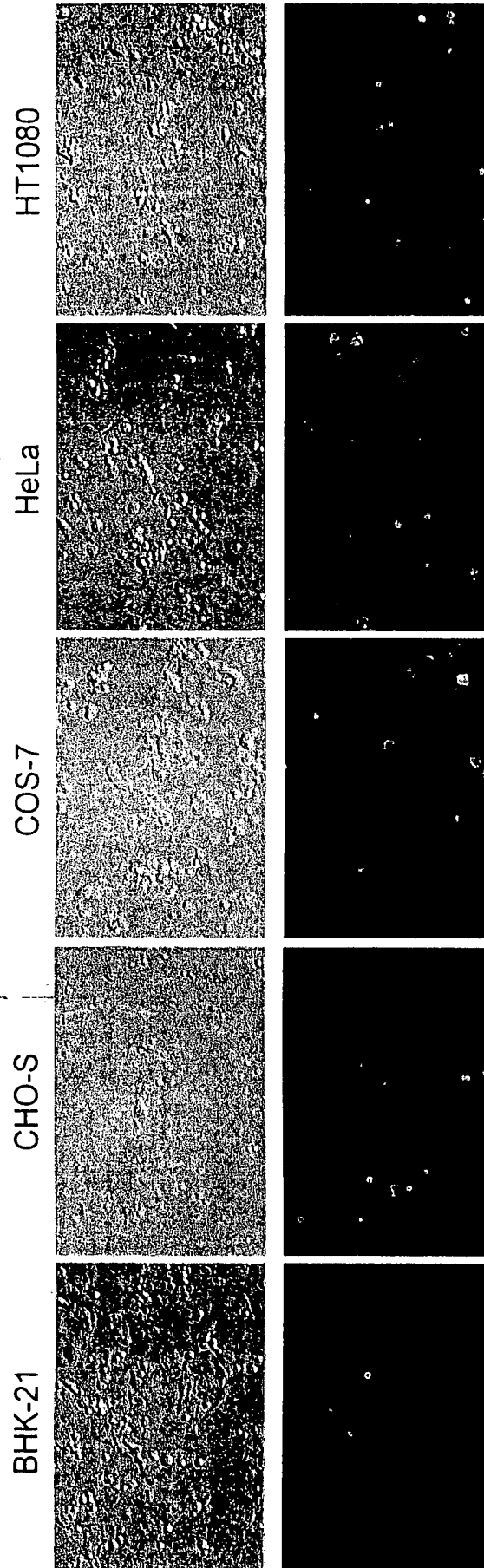


FIG. 56



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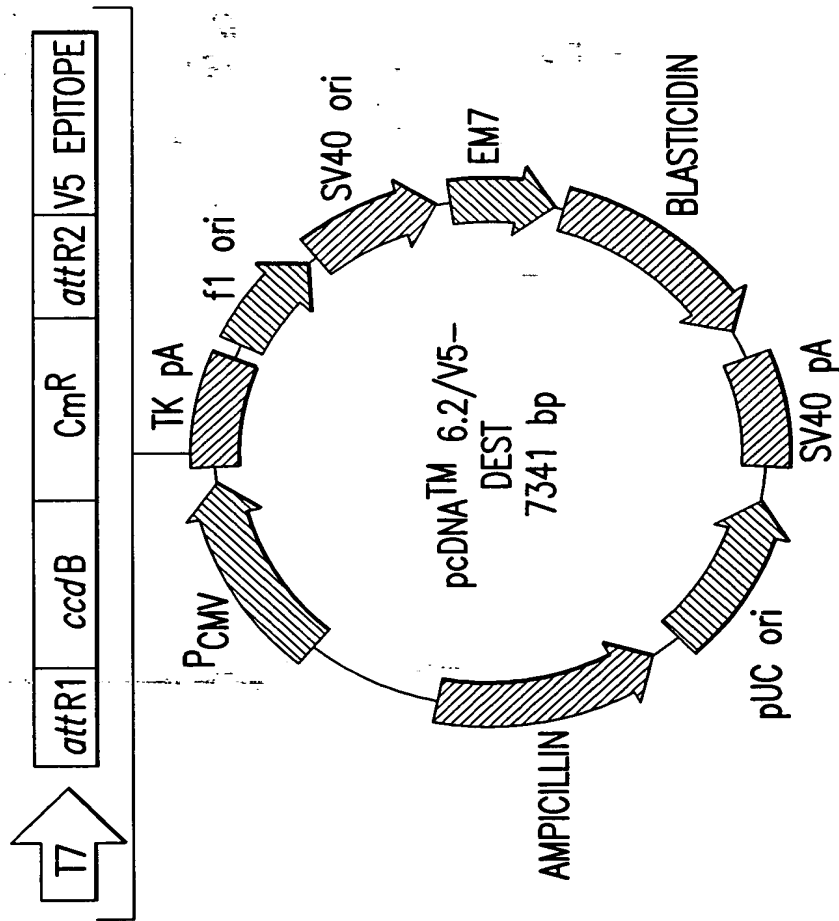


FIG.57

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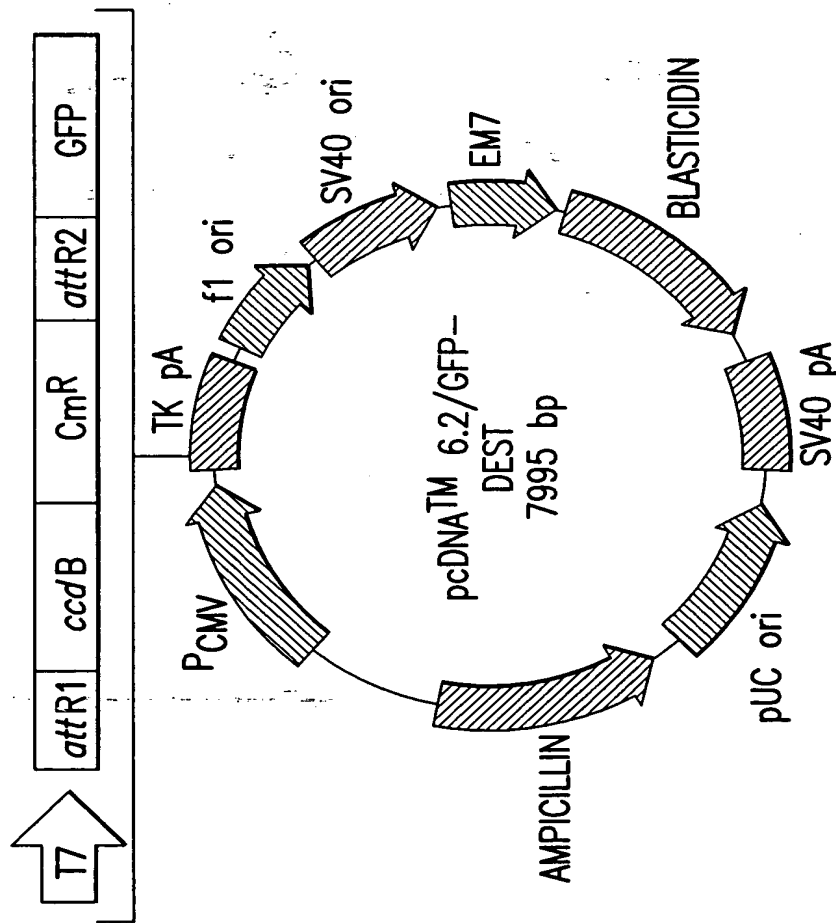


FIG.58

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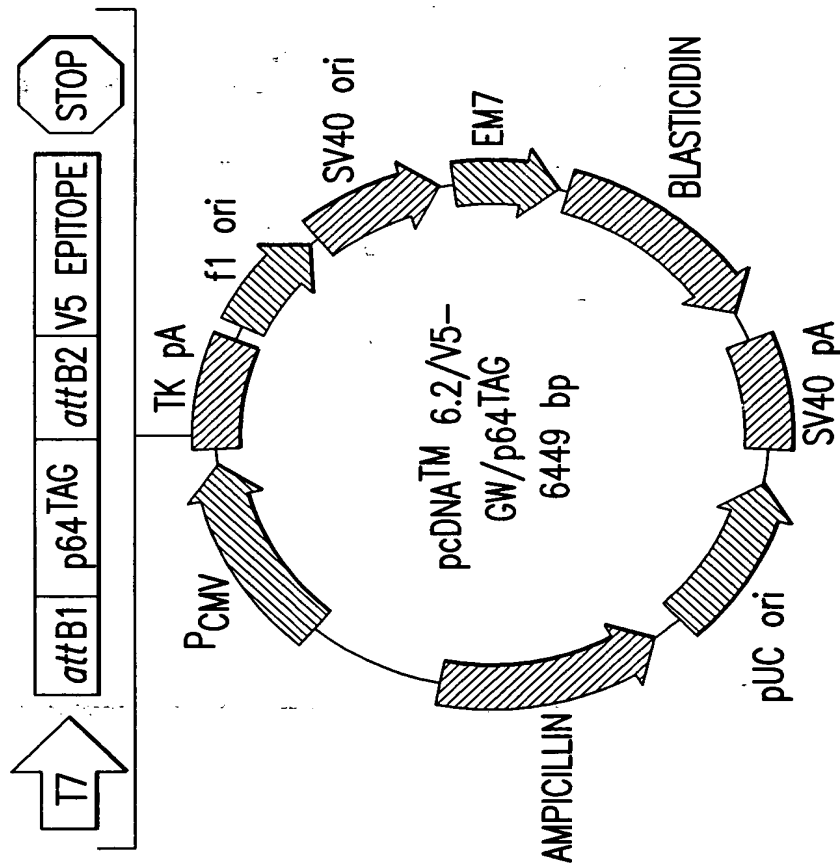


FIG.59

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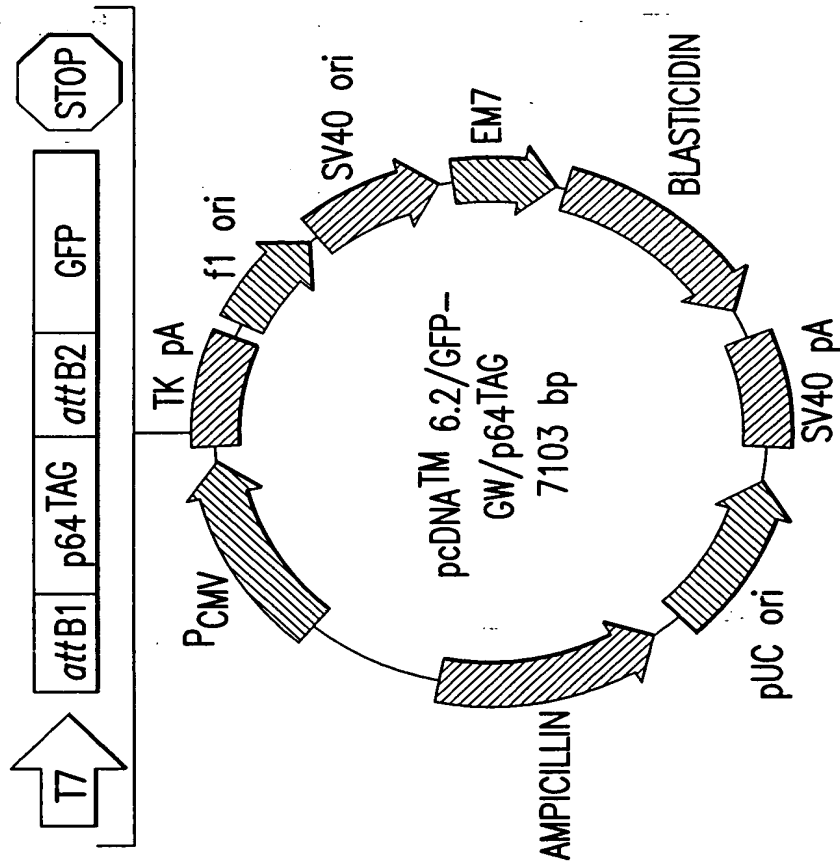


FIG.60

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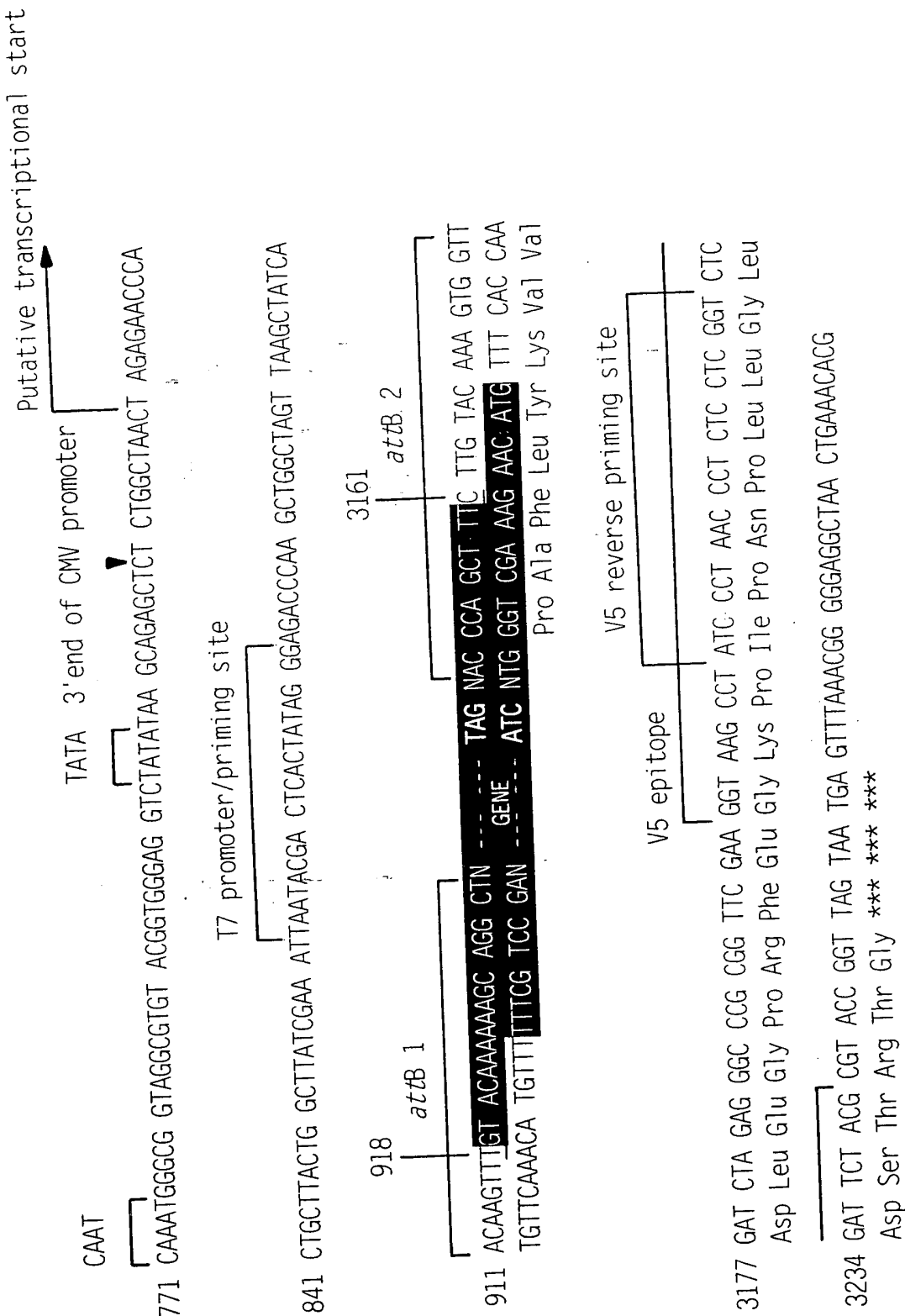


FIG. 61A

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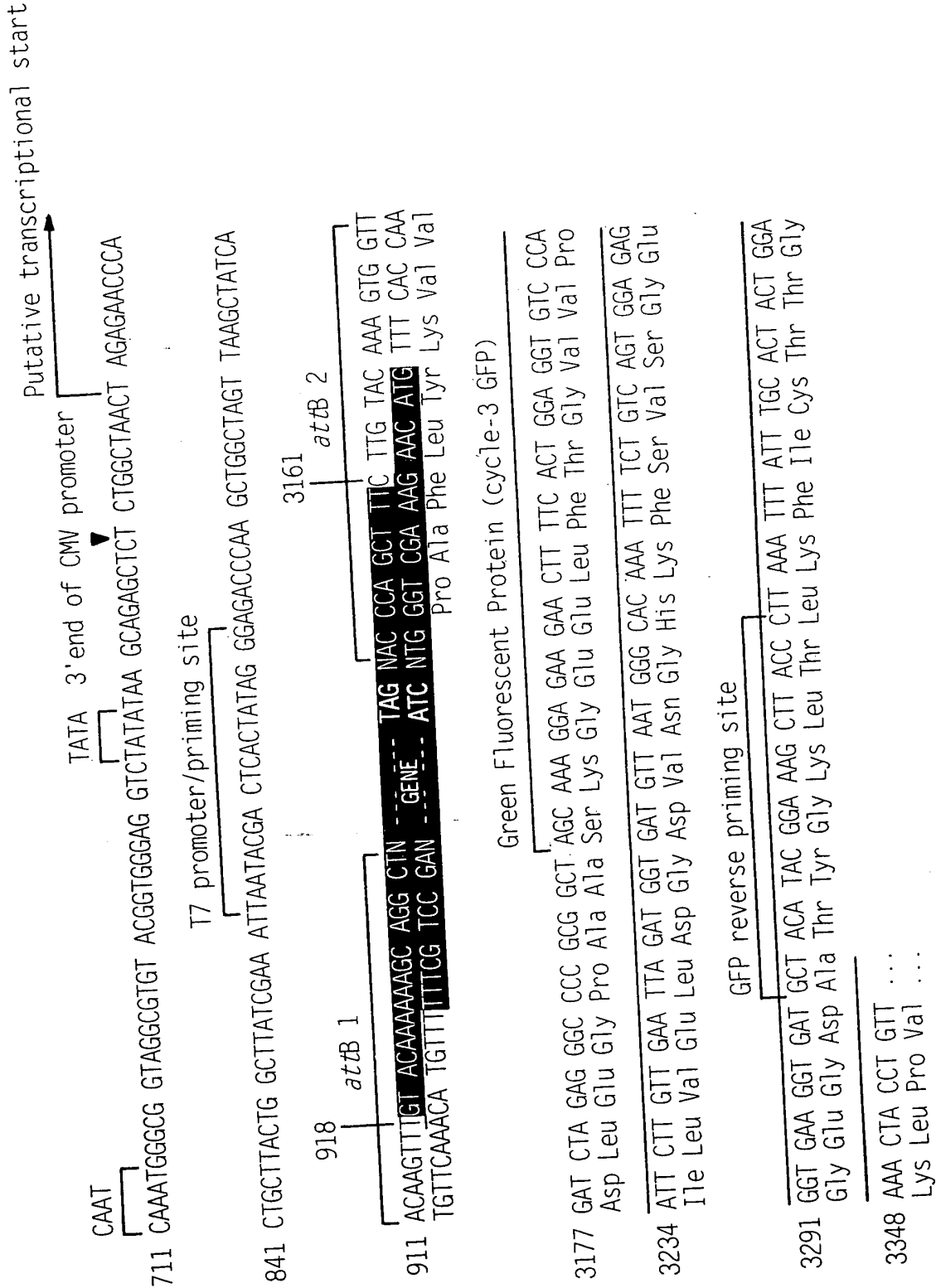


FIG. 61B

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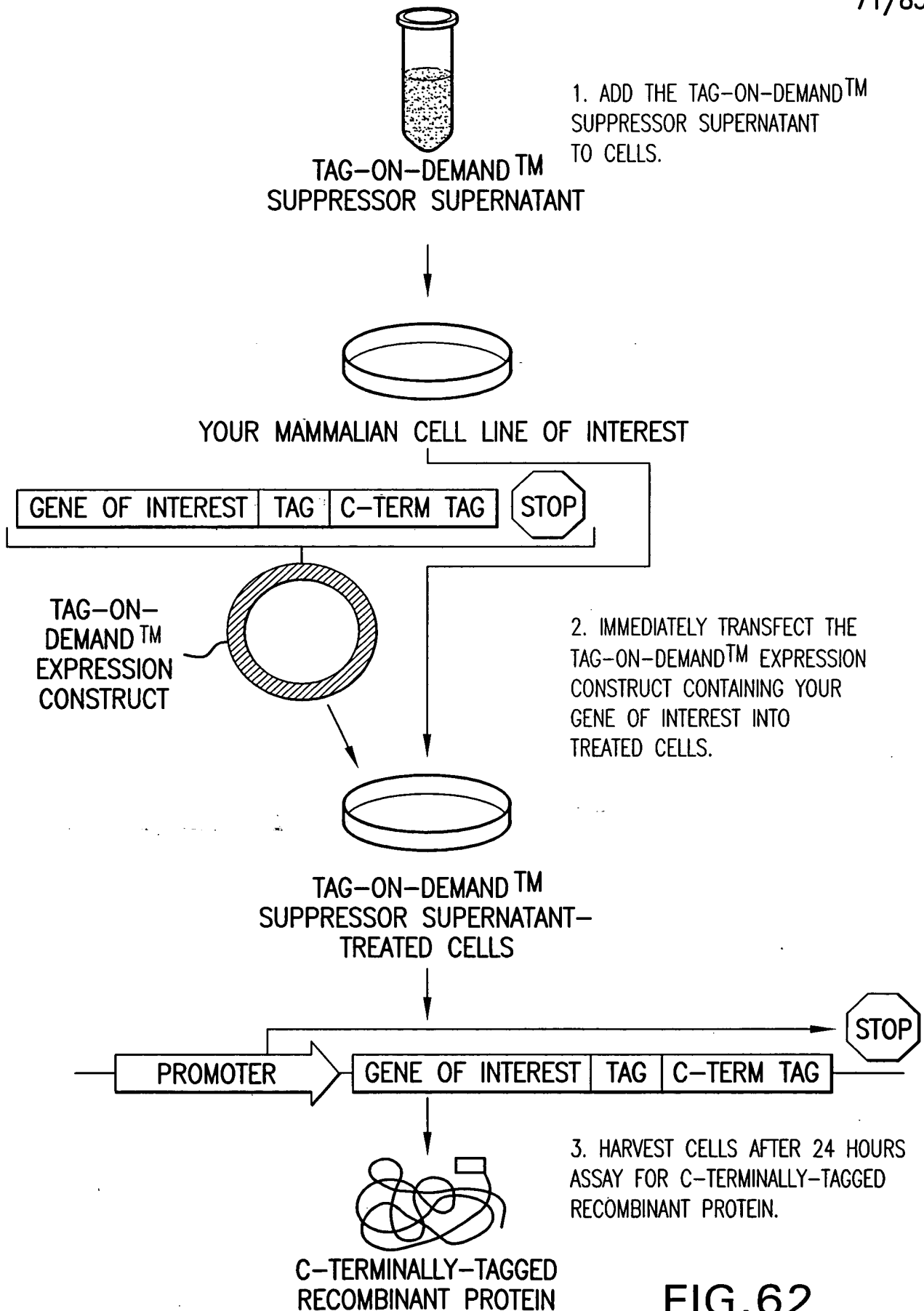
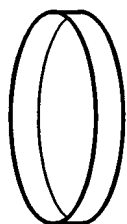


FIG.62

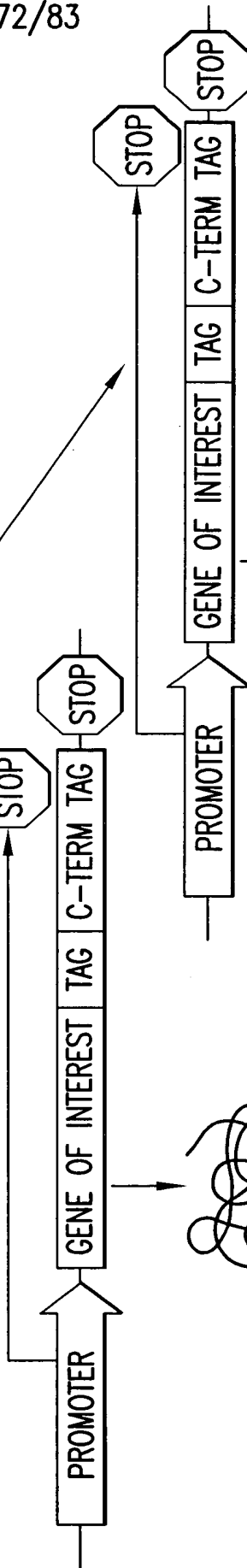
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YOUR STABLE MAMMALIAN CELL  
 LINE OF INTEREST

1. EXPRESS NATIVE RECOMBINANT PROTEIN OR ADD THE TAG-ON-DEMAND™ SUPPRESSOR SUPERNATANT TO CELLS, AND HARVEST CELLS AFTER 24-28 HOURS TO ASSAY FOR C-TERMINALLY-TAGGED RECOMBINANT PROTEIN.



+ TAG-ON-DEMAND™  
 SUPPRESSOR SUPERNATANT



NATIVE RECOMBINANT PROTEIN

C-TERMINALLY-TAGGED  
 RECOMBINANT PROTEIN

FIG. 63



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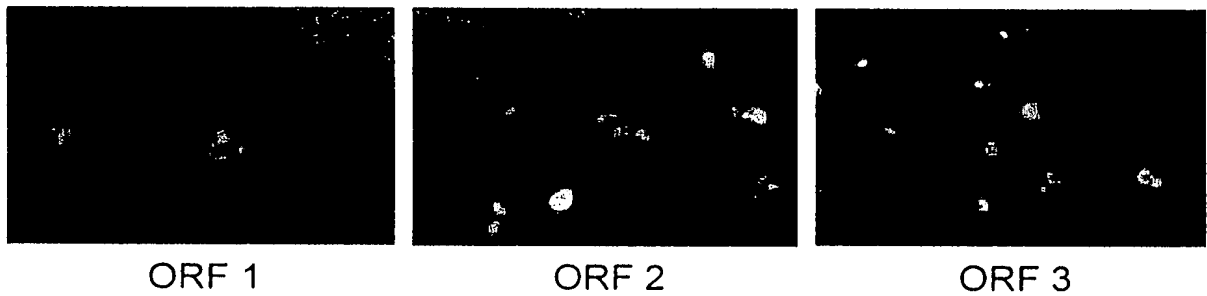


FIG.64

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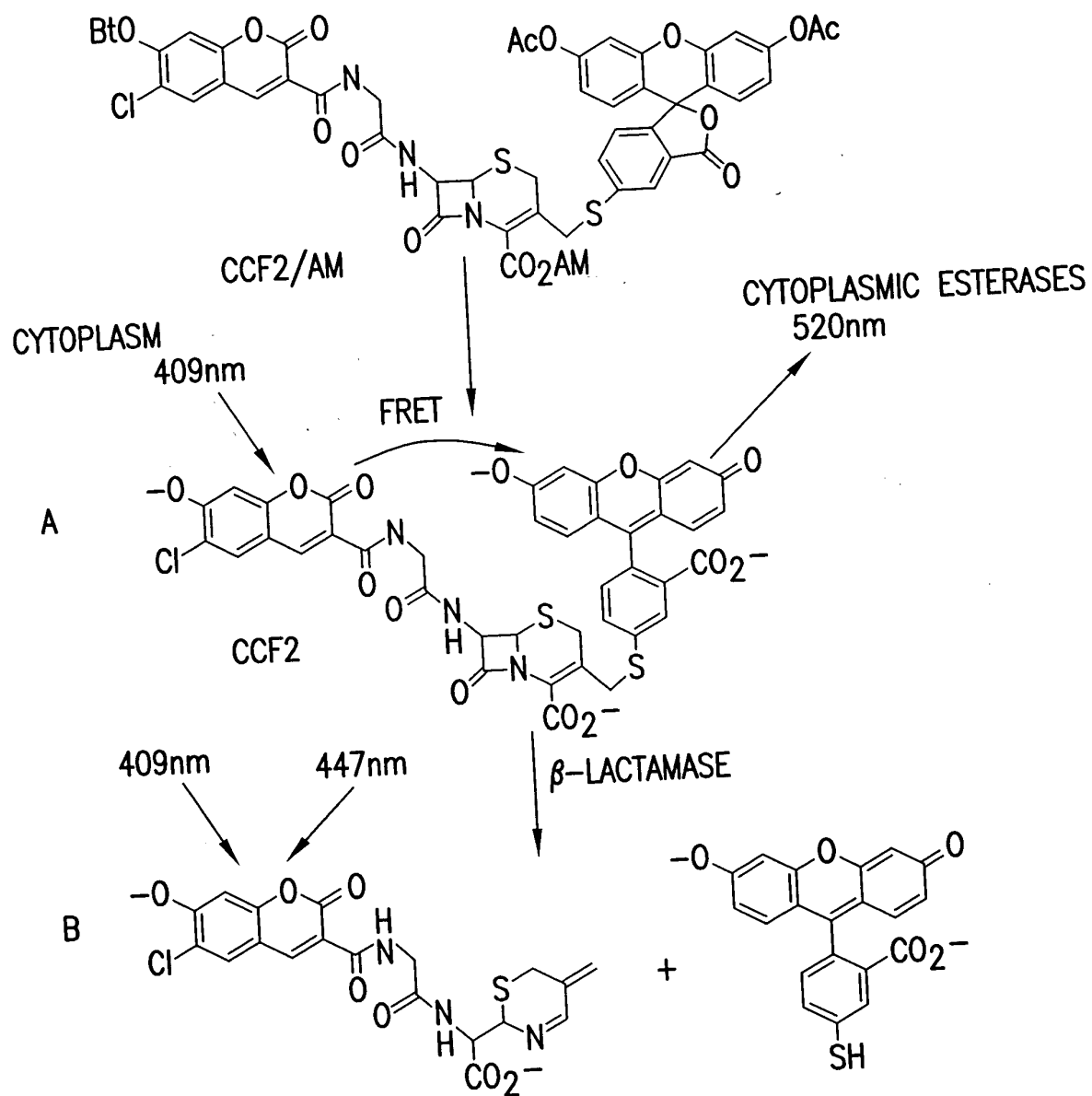


FIG.65

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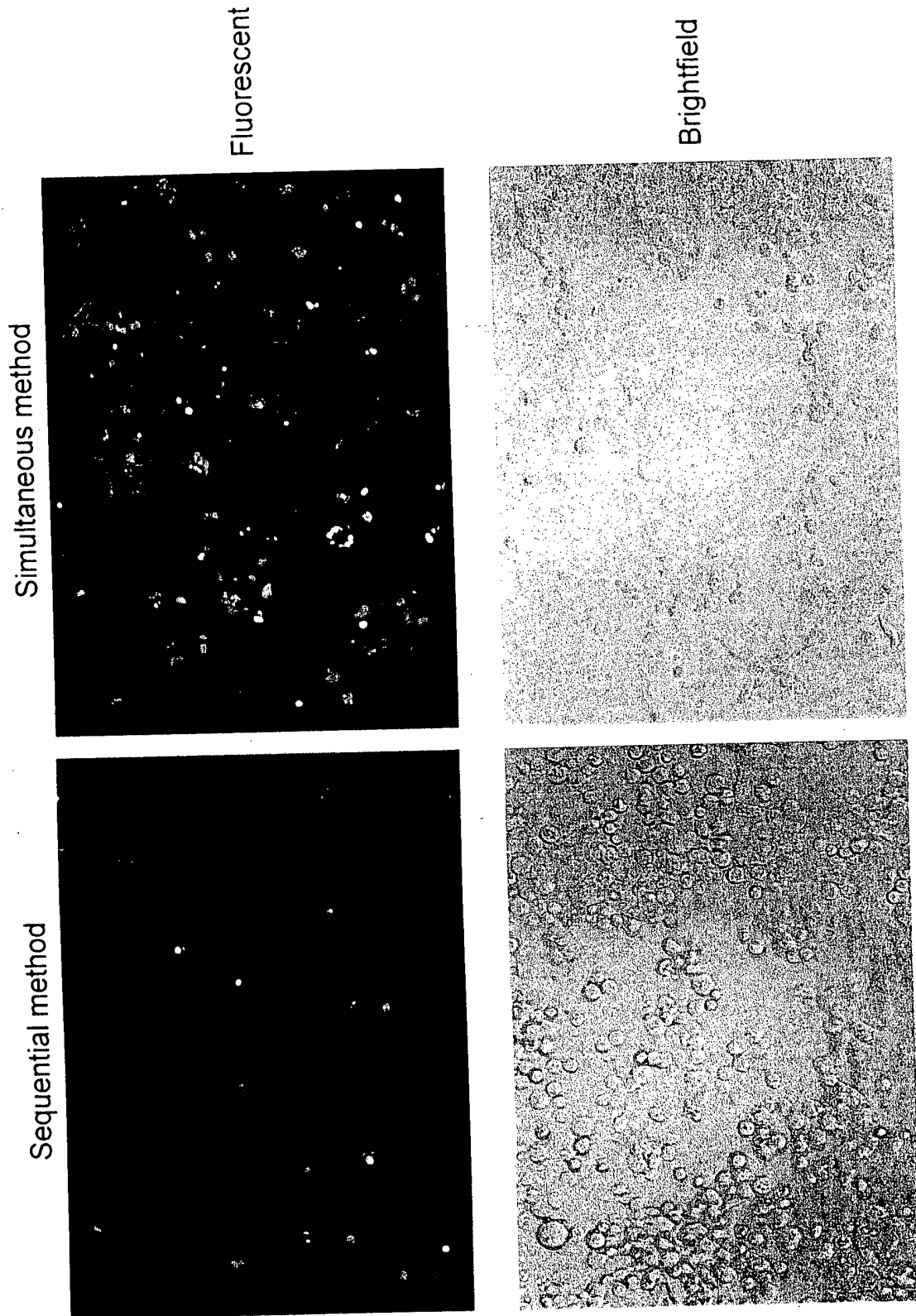
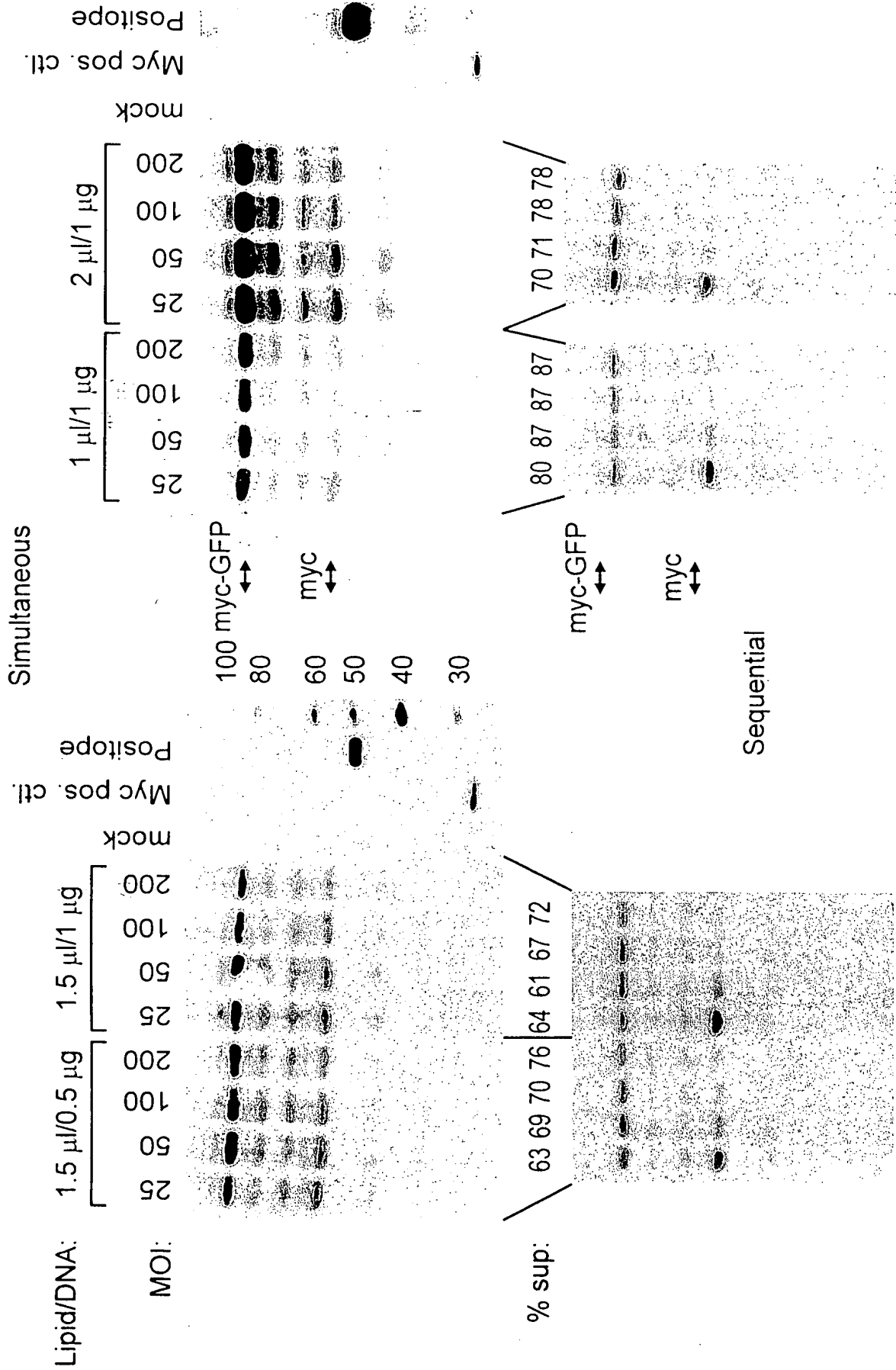


FIG.66



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FIG.67

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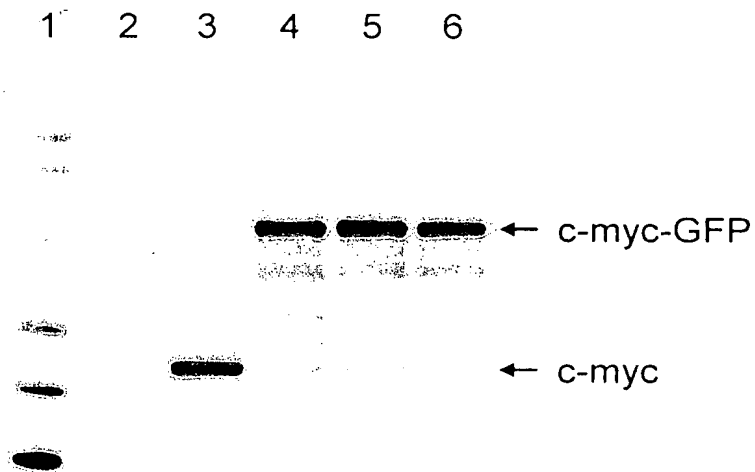


FIG.68

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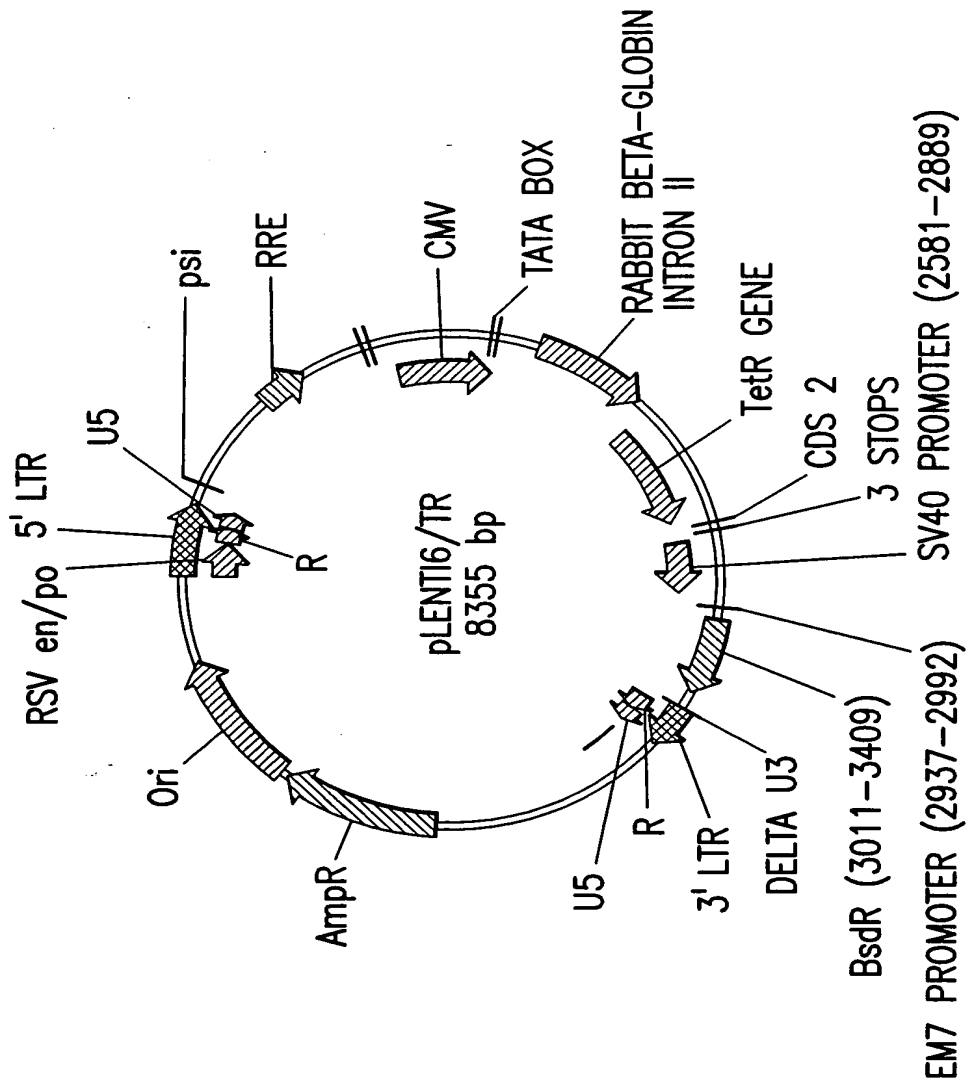


FIG.69

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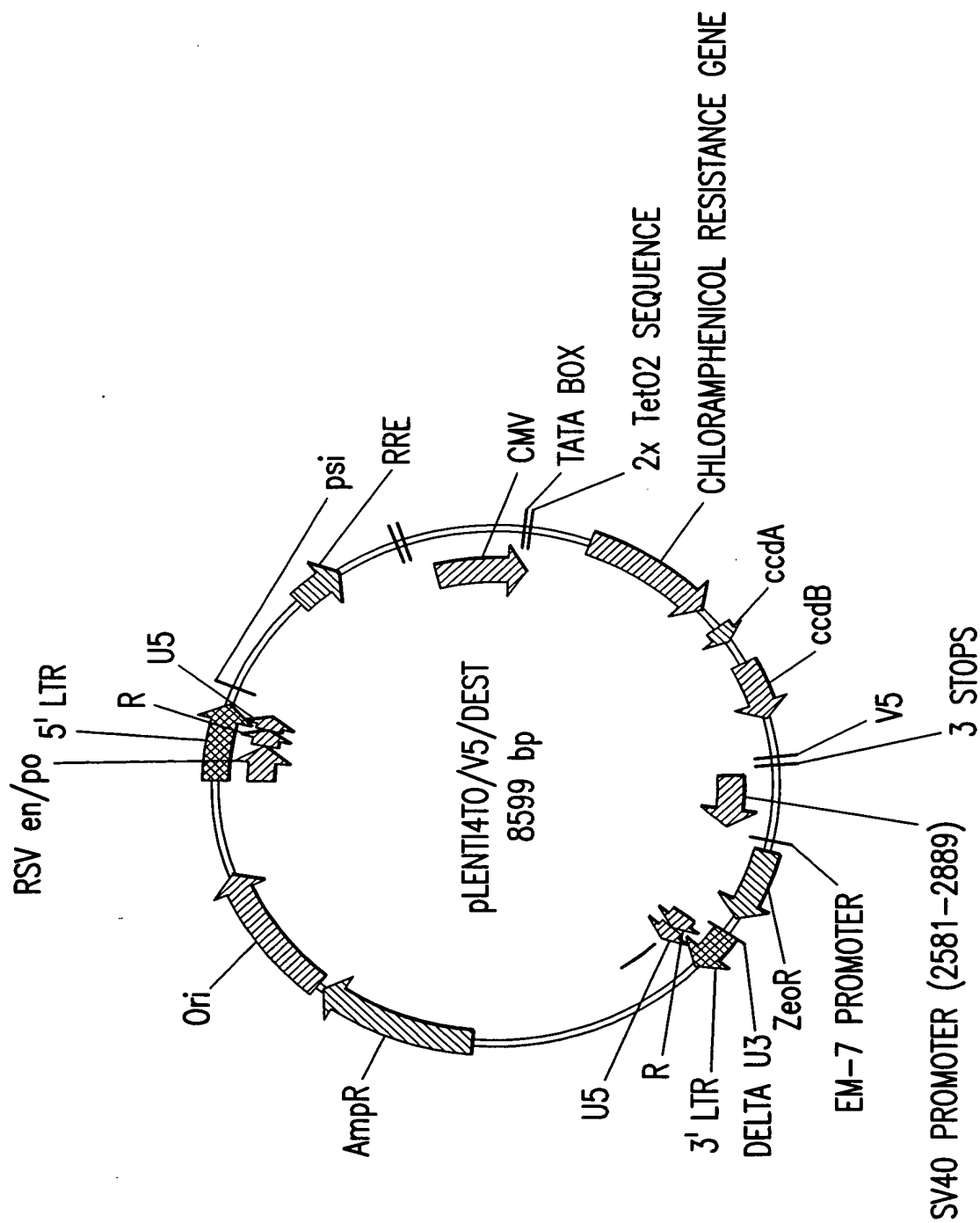


FIG.70A

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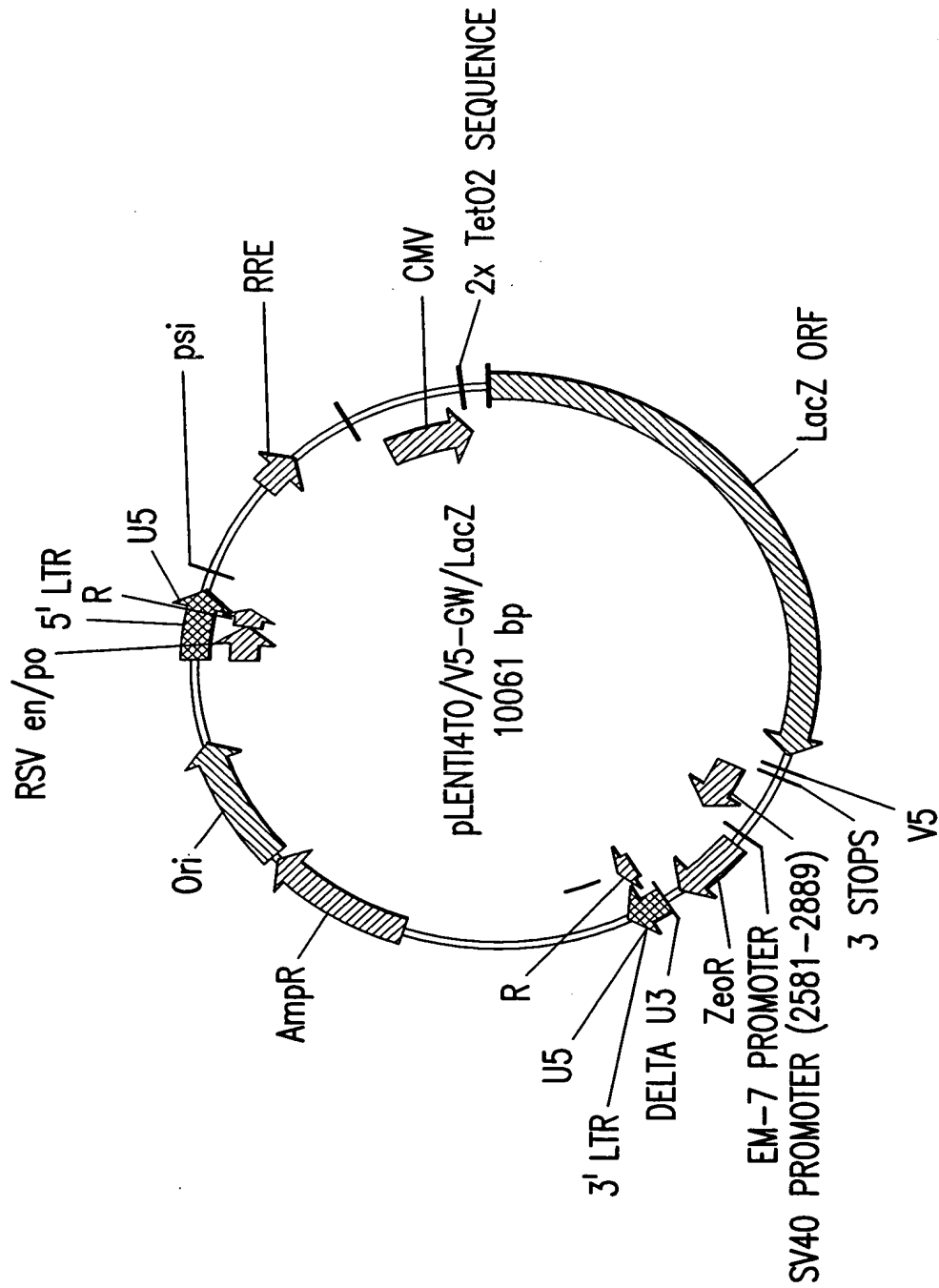


FIG.70B



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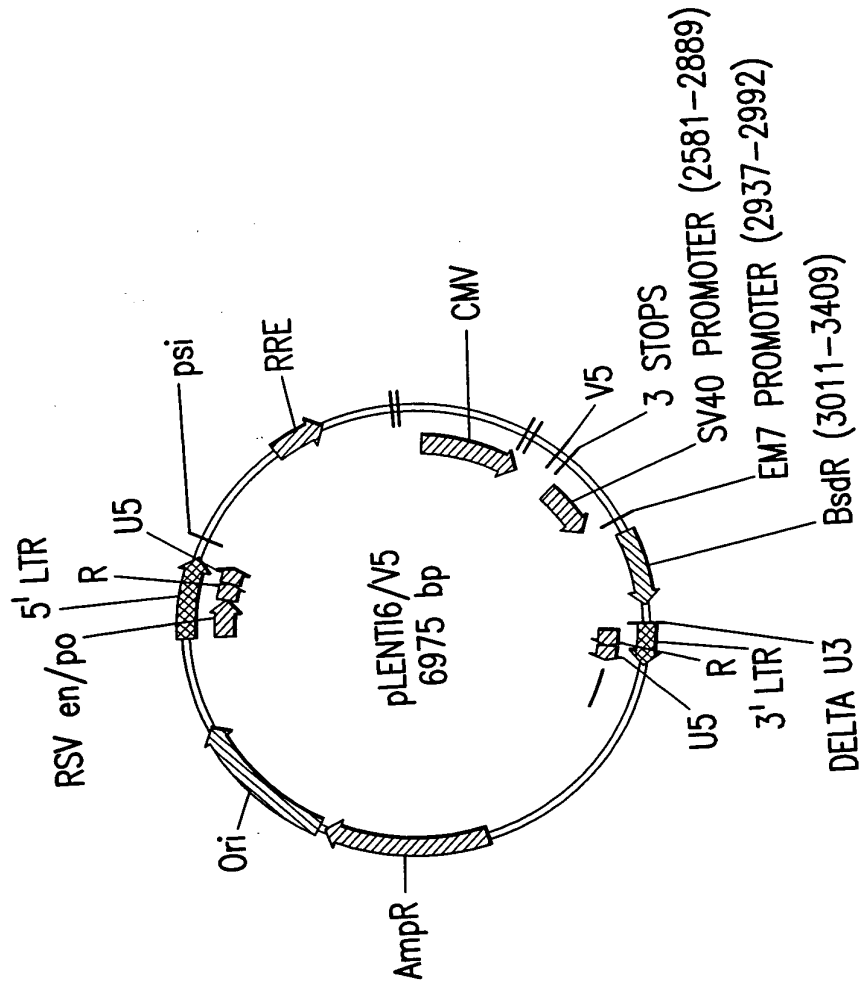


FIG. 71

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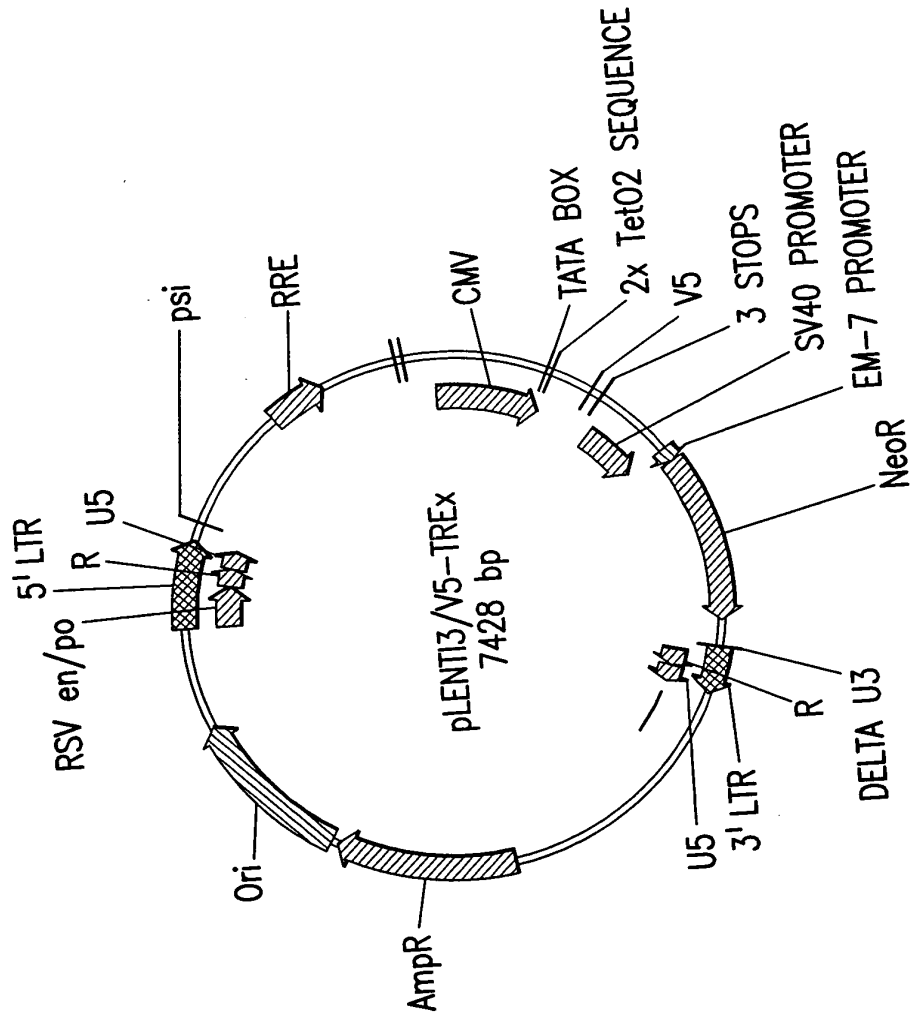


FIG.72

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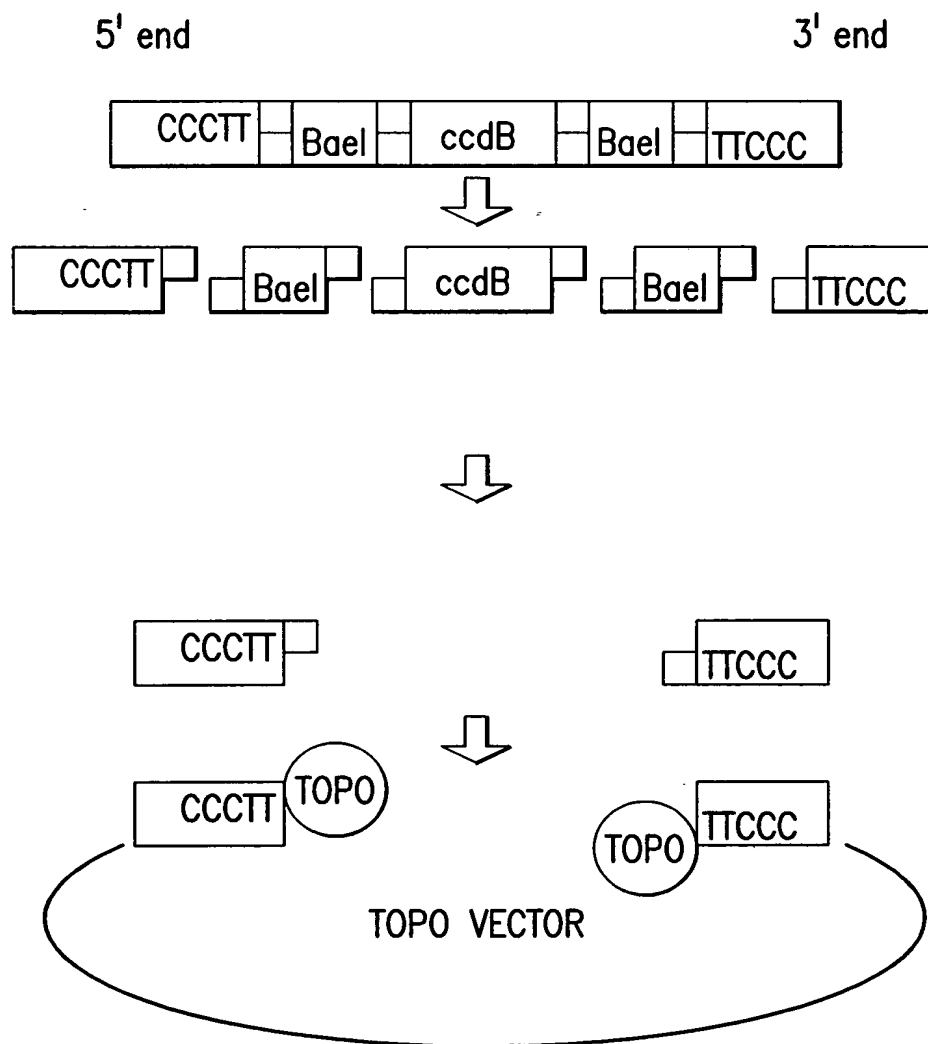


FIG.73